

The University of Southern Mississippi
Graduate Bulletin
1990 - 1991



GRADUATE PROGRAMS

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THE UNIVERSITY OF SOUTHERN MISSISSIPPI BULLETIN



Graduate Programs 1990-1991

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CALENDAR FOR SUMMER SESSION, 1990

Hattiesburg Campus (Ten-Week Term)

Friday, May 11	Applications for admission should be submitted by this date
Sunday, June 3	Residence halls open
Monday, June 4	Registration by appointment Final orientation for new students Monday night classes meet
6:20 PM	
Tuesday, June 5	Day classes begin
10:00 AM	Late registration and add/drop begin
Monday, June 11	Last day to register for or add full-term or first-term (Q) classes
Monday, June 18	Last day to drop first-term (Q) classes without academic penalty
Monday, July 2	Last day to drop full-term classes without academic penalty
Wednesday, July 4	Independence Day Holiday
6:20 PM	Wednesday night classes meet
Thursday, July 5	End of first-term (Q) classes Mid-point in Summer Session Last day to file application for undergraduate and graduate degrees for Fall, 1990 Commencement
Friday, July 6	Registration for second-term (QQ) classes Second-term (QQ) classes begin
Thursday, July 12	Last day to register for or add second-term (QQ) classes
Thursday, July 19	Last day to drop second-term (QQ) classes without academic penalty
Saturday, July 28	Make-up day for MWF day classes
Friday, August 3	Last day of regularly-scheduled classes
Monday-Friday August 6-10	Examinations (including night classes)
Friday, August 10	
6:30 PM	Commencement
Saturday, August 11	Residence halls close

CALENDAR FOR FALL SEMESTER, 1990

Hattiesburg Campus

Friday, August 10	Applications for admission should be submitted by this date
Friday, August 24	Last day to pay fees without late fee
Sunday, August 26	Residence halls open
Monday, August 27	Final orientation and registration for new and reapplying students only Night classes begin
Tuesday, August 28	Day classes meet on MWF schedule today only Late registration and add/drop begin
Wednesday, August 29 8:00 AM	Day classes begin on regular schedule Last day to register for first-term (Q) classes
Friday, August 31	Last day to register for or add full-term classes
Monday, September 3	Labor Day Holiday Monday day and night classes will not meet
Tuesday, September 18	Last day to drop first-term (Q) classes without academic penalty
Tuesday, October 9	Last day to drop full-term classes without academic penalty
Tuesday, October 16	Midpoint in Fall Semester End of first-term (Q) classes Last day to file application for undergraduate and graduate degrees for Spring, 1991 Commencement
Wednesday, October 17	Registration for second-term (QQ) classes Second-term (QQ) classes begin
Thursday, October 18	Last day to register for second-term (QQ) classes
Tuesday, November 6	Last day to drop second-term (QQ) classes without academic penalty
Tuesday, November 20 6:00 PM	Thanksgiving Holidays begin Night classes do not meet
Monday, November 26 8:00 AM	Classes resume
Friday, December 7	Last day of regularly scheduled classes
Monday - Friday, December 10-14	Examinations (including night classes)
Friday, December 14 6:30 PM	Commencement
Saturday, December 15	Residence halls close

CALENDAR FOR SPRING SEMESTER, 1991

Hattiesburg Campus

Friday, December 14	Applications for admission should be submitted by this date
Friday, January 11, 1991	Last day to pay fees without late fee
Sunday, January 13	Residence halls open
Monday, January 14	Final orientation and registration for new and reapplying students only Night classes begin
Tuesday, January 15	Day classes begin on regular schedule Late registration and add/drop begin
Wednesday, January 16	Last day to register for first-term (Q) classes
Friday, January 18	Last day to register for or add full-term classes
Monday, February 4	Last day to drop first-term (Q) classes without academic penalty
Tuesday, February 12	Mardi Gras Holiday Tuesday day and night classes will not meet
Tuesday, February 26	Last day to drop full-term classes without academic penalty
Tuesday, March 5	Midpoint in Spring Semester End of first-term (Q) classes Last day to file application for undergraduate and graduate degrees for Summer, 1991 Commencement
Wednesday, March 6	Registration for second-term (QQ) classes Second-term (QQ) classes begin
Thursday, March 7	Last day to register for second-term (QQ) classes
Friday, March 8 6:00 PM	Spring Holidays begin
Monday, March 18	Classes resume
Thursday, March 28 9:15 PM	Easter Holidays begin
Saturday, March 30	USM Day
Monday, April 1	Easter Holiday Monday day and night classes will not meet
Tuesday, April 2	Classes resume
Tuesday, April 4	Last day to drop second-term (QQ) classes without academic penalty
Tuesday, April 30	Last day of Tuesday - Thursday classes
Wednesday-Thursday May 1 - 2 6:30 PM	Wednesday and Thursday night class examinations
Friday, May 3	Last day of regularly-scheduled classes
Monday-Friday May 6-10	Examinations (including Monday and Tuesday night classes)
Friday, May 10 6:30 PM	Commencement
Saturday, May 11	Residence halls close

CALENDAR FOR SUMMER SESSION, 1991

Hattiesburg Campus
(Ten-Week Term)

Friday, May 10	Applications for admission should be submitted by this date
Friday, May 31	Last day to pay fees without late fee
Sunday, June 2	Residence halls open
Monday, June 3	Final orientation and registration for new and reapplying students only
6:20 PM	Monday night classes meet
Tuesday, June 4	Day classes begin
	Late registration and add/drop begin
	Last day to register for first-term (Q) classes
Monday, June 10	Last day to register for or add full-term classes
Monday, June 17	Last day to drop first-term (Q) classes without academic penalty
Monday, July 1	Last day to drop full-term classes without academic penalty
Wednesday, July 3	Mid-point in Summer Session
	End of first-term (Q) classes
	Last day to file application for undergraduate and graduate degrees for Fall, 1991 Commencement.
Thursday, July 4	Independence Day Holiday
6:20 PM	Thursday night classes meet
Friday, July 5	Registration for second-term (QQ) classes
	Second-term (QQ) classes begin
Monday, July 8	Last day to register for or add second-term (QQ) classes
Saturday, July 6	Make-up day for Tuesday-Thursday and second-term (QQ) classes
Thursday, July 18	Last day to drop second-term (QQ) classes without academic penalty
Friday, August 2	Last day of regularly scheduled classes
Monday-Friday August 5-9	Examinations (including night classes)
Friday, August 9	
6:30 PM	Commencement
Saturday, August 10	Residence halls close

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JOHN COX, B.S.	Director of Sports Broadcasting
M. REGIEL NAPIER, B.S., M.S.	Sports Information Director
BEN WILLOUGHBY, B.S.	Director, Eagle Athletic Club

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UNIVERSITY MISSION AND GOAL

The University of Southern Mississippi, located in the south central part of the state, is operated by the State of Mississippi as one of eight public universities. The University identifies its primary service area as the southern half of the state, although as a university, it is committed to serve the entire state with programs and services not available from other public educational institutions, with programs and services in which the University has specialized expertise, and with programs and services where the University is uniquely organized to fulfill existing needs. The University also believes that it should serve residents of other states and areas as far as possible within the limits of the law, financial resources, and physical facilities, and the University accepts the principle that a student body with divergent backgrounds is often desirable in creating an educational environment. In this belief and acceptance, the University sees itself as a regional institution.

However, while the University feels that it is accountable to all of its clientele for the highest quality possible in its programs and services, it acknowledges that by virtue of its being a state institution, it ultimately is responsible to the citizens of the State of Mississippi, their duly elected representatives, and their appointed representatives of legally constituted agencies.

The Purposes of the University

The University of Southern Mississippi is an emerging, comprehensive institution committed to seek and reward distinction among its programs, faculty, students, and services. Its purposes are to provide high-quality teaching, research, and service for the benefit of the people of Mississippi, the Gulf South, and the nation. In the direction for excellence set forth by the Board of Trustees of State Institutions of Higher Learning, in the stated commitment of its administration to aim at distinction, and in the energetic atmosphere created by faculty, students, and alumni, the University has an affirmative context as well as a capacity for its movement toward greater recognition of its programs and services.

The transmission of knowledge—instruction in its broadest sense—continues to be the University's central concern. As a comprehensive term, the transmission of knowledge incorporates the University's fundamental commitment to excellence in teaching and instructional activities which provide all students, at any stage of their lives and careers, with a wide array of opportunities for both a liberal education and specialized professional preparation. At the same time, the University transmits knowledge in all of its functions: by presentation, publication, and application of its research; by its far-reaching service programs; and by the sustained enrichment of the University community through broad experiences in the creative arts. As it aims toward recognition and distinction, the University seeks coherence and interdependence among teaching, research, and service, as it likewise seeks coherence and a continuum among undergraduate, graduate, and lifelong learning.

The University is in the same manner committed to the expansion and preservation of knowledge. Research is defined in the broadest possible terms, both in language appropriate to various disciplines and to its nature as an adventure in human thought. The University is expected to be a center for creativity and the development of new knowledge. The University aims, too, to preserve what is known by means of its libraries, museums, galleries, collections, and archives.

In the expansion and preservation of knowledge, as well as in its transmission, the University means to serve the large community to which it is responsible. It will continue to provide various learning opportunities through its programs of extension and continuing education, and it commits the full range of its intellectual resources to meet the changing needs of the society which it serves.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

(Buckley Amendment)

The Buckley Amendment deals with one subject only: educational records. The purpose of the law is to define, more precisely than ever has been done, who may or may not see them. On the one hand, the law grants students guaranteed access; on the other hand, it takes from the universities the privilege of indiscriminate disclosure.

The Buckley Amendment sets forth these main requirements:

- (1) it allows a student access to each educational record that a university or college keeps on him or her;
- (2) it requires the institution to establish a policy on how students can go about seeing specific records;
- (3) it requires the institution to inform all students as to what rights they have under the Amendment, how they can act on these rights according to school policy, and how they can see a copy of the policy; and
- (4) it requires the institution to seek student permission, in writing, before disclosing any personally identifiable record to individuals other than professional personnel employed in the university or college (and others who meet certain specified requirements).

The University has developed and put into writing a policy for handling requests from students and for disclosing personally identifiable information about students. Students are notified at least once a year of their rights under the law by publishing the University policy in the student newspaper.

RETENTION OF STUDENTS AND PROGRAM COMPLETION INFORMATION

The Office of Graduate Admissions will provide, upon request, information regarding student retention as well as the number and percentage of students completing specific graduate programs at The University of Southern Mississippi. For further information, please contact:

Director of Graduate Admission
The University of Southern Mississippi
Southern Station, Box 10066
Hattiesburg, MS 39406—0066
(601) 266-5137

THE GRADUATE SCHOOL

Robert T. van Aller, Dean
Hattiesburg, MS 39506-5024
(601) 266-4369

The Graduate School at The University of Southern Mississippi was established in 1947 to recognize the University's growing responsibilities as a center of higher learning and to provide an academic environment in which advanced research and free inquiry could develop to the advantage of both the student and the State. In the years since 1947, the University's graduate programs have developed logically on the growing points of strong undergraduate schools and departments to meet the needs for professional competence beyond the academic measure of the baccalaureate degree.

In response to the need to offer graduate programs beyond the boundaries of the Hattiesburg Campus, the Board of Trustees of Institutions of Higher Learning in 1972 authorized the University to grant graduate degrees on the campus at The University of Southern Mississippi, Gulf Park. Course work taken at the Hattiesburg and Gulf Park campuses is considered as campus work.

The Graduate School's Place Within the University Structure

The Graduate School is administered by a dean executing policies determined by the Graduate Council of which the Dean of the Graduate School serves as chair.

The present composition of the Graduate Council includes elected members from the College of The Arts, the College of Business Administration, the College of Education and Psychology, the College of Health and Human Sciences, the College of Liberal Arts, and the College of Science and Technology. Permanent *ex officio* members are the President of the University and the University Librarian. The University Registrar serves as secretary to the Council. The Dean of the Graduate School serves as corresponding secretary.

The responsibilities of the Graduate Council, representing both administration and faculty, include:

1. Determining policies of admission to the Graduate School.
2. Considering and approving graduate programs submitted to the Council through curriculum committees of each college and school.
3. Electing members of the Graduate Faculty upon recommendation by the academic deans.
4. Approving new courses (and deleting courses) for graduate credit.
5. Acting upon any other problems affecting graduate programs.

The graduate programs approved by the Council are carried out through the Graduate Faculty in each degree-granting college or school of the University's academic organization.

DEGREE PROGRAMS OFFERED*

The University of Southern Mississippi offers graduate level programs in nearly every recognized academic discipline. Even those departments not yet ready to offer master's or doctoral degrees are usually equipped to offer a graduate minor. In addition, master's degrees are offered at USM, Gulf Park. For specific information about the master's programs at Gulf Park, please see its section in this **Bulletin**.

The degrees which are offered and their majors are listed below. Refer to each department for emphasis areas.

*Please note that degree offerings sometimes change because of changes in curricula. Those listed in this **Bulletin** are those granted as of the 1989-1990 academic year.

DEGREES OFFERED

DOCTOR OF EDUCATION

Education
Health, Physical Education,
and Recreation
Science Education

DOCTOR OF PHILOSOPHY

Biological Sciences	History
Chemistry	Marine Science
Communication	Music Education
Counseling Psychology	Polymer Science
Education	Psychology
English	Science Education
Health, Physical Education, and Recreation	Speech and Hearing Sciences

DOCTOR OF MUSIC EDUCATION

Music Education

DOCTOR OF MUSICAL ARTS

Performance and Pedagogy

SPECIALIST IN EDUCATION

Education	Home Economics Education
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SPECIALIST IN ENGLISH

English

MASTER OF ART EDUCATION

Art Education

MASTER OF ARTS

Anthropology	Philosophy
Communication	Political Science
Criminal Justice	Psychology
English	Speech and Hearing Sciences
Geography	
History	

MASTER OF BUSINESS ADMINISTRATION

Business Administration

MASTER OF EDUCATION

Adult Education	Science Education
Business Education	Special Education
Counseling and Personnel Services	
Educational Administration and Supervision	
Educational Curriculum and Instruction	
Educational Media and Technology*	

*Admission suspended

MASTER OF FINE ARTS

Theatre

MASTER OF LIBRARY SCIENCE

Library Science

MASTER OF MUSIC

Music

MASTER OF MUSIC EDUCATION

Music Education

MASTER OF PROFESSIONAL ACCOUNTANCY

Accounting

MASTER OF PUBLIC HEALTH

Public Health

MASTER OF SCIENCE

Anthropology	Industrial and Vocational Education
Biological Sciences	Institution Management
Business Education	Manufacturing Technology
Chemistry	Marine Science
Communication	Mathematics
Community Health Nursing	Medical Technology
Computer Science	Nursing Service Administration
Counseling Psychology	Physical Education
Criminal Justice	Physics
Economic Development	Political Science
Educational Curriculum and Instruction	Polymer Science
English	Psychiatric Nursing
Family Life Studies	Psychology
Geography	Public Relations
Geology	Recreation
Health Education	Research and Evaluation
History	Science Education
Home Economics	Speech and Hearing Sciences
	Teleprocessing Science

MASTER OF SOCIAL WORK

Social Work

UNIVERSITY PRESS OF MISSISSIPPI

The University Press of Mississippi was founded in 1970 to encourage the dissemination of the fruits of research and study through the publication of scholarly works. Functioning as the scholarly publishing arm of the state-supported universities in Mississippi, the University Press is governed by a Board of Directors made up of one representative from each of the eight universities, one representative from the Board of Trustees of State Institutions of Higher Learning, and the Director of the Press.

The University Press publishes between ten and twenty books each year. Primary areas of interest are Mississippi history and literature, but manuscripts in all areas of study are welcomed.

Administrative offices of the University Press are located in the Education and Research Complex, 3825 Ridgewood Road, Jackson, Mississippi.

CENTER FOR INTERNATIONAL EDUCATION

An administrative entity under the Vice President for Research and Extended Services, the Center for International Education coordinates all USM programs bringing international students to the United States and all programs sending USM students and those of its consortium members abroad for academic credit.

The Center has three components: the English Language Institute, the Office of International Student Affairs and the Office of International Programs.

The English Language Institute offers intensive language instruction, courses in conversational English, and specialized courses in Business English, English for Science and Technology, and TOEFL Preparation. International students accepted to the Graduate School of the University, and those planning to apply for admission to the Graduate School, often sharpen their language skills at the English Language Institute. For further information, contact the Director, English Language Institute, USM, Hattiesburg, MS 39406-5065, USA.

The Office of International Student Affairs coordinates all facets of international admissions and student services. The ISA provides counseling on immigration regulations, personal matters, culture shock and adjustment, as well as some academic counseling in conjunction with the various departments. The Office processes all international applications, evaluates foreign academic credentials and issues the appropriate immigration documents for the non-immigrant foreign student. Multi-cultural programming for the international students and the community is also coordinated by the ISA.

The ISA Office disseminates USM information to foreign schools, U.S. embassies/consulates abroad, and non-profit international organizations (such as the Institute for International Education).

This Office also provides information to and immigration documents for research scholars invited by various USM departments to participate in limited research opportunities.

For further information, write to:

Director
Office of International Student Affairs
Center for International Education
The University of Southern Mississippi
Southern Station, Box 5151
Hattiesburg, MS 39406-5151
U.S.A.
Tel. (601) 266-4841 FAX (601) 266-5723

Office of International Programs. The Office of International Programs administers a variety of programs providing USM students opportunities to study abroad. Summer-term programs offering regular USM academic credit include:

The British Studies Program, a summer term in London in which USM functions as the academic and logistical linchpin for an eight school consortium comprised of the University of South Alabama, Memphis State University, Georgetown College, Hinds Community College, Midwestern State University, East Texas State University, Auburn University-Montgomery, and Northeast Louisiana University.

The Austrian Studies Program in Vienna, Austria

The Caribbean Studies Program in Ocho Rios, Jamaica

The French Language Program, France.

The Spanish Language Program in Cuernavaca, Mexico

The Japanese Studies Program in Tokyo, Japan

A year long exchange program with the University of Wales-Swansea and the Canadian Studies program, designed to enhance Canadian course content, are also coordinated by the office.

For further information write to:
Center for International Education
The University of Southern Mississippi
Southern Station, Box 5151
Hattiesburg, MS 39406-5151
U.S.A.
Tel. (601) 266-4344 FAX (601) 266-5723

INTERNATIONAL STUDENTS

The University enrolls graduate students from outside the United States. Assistance in academic and non-academic matters before and during the international student's stay at the University is provided by the Office of International Student Affairs.

English Language Proficiency: Applicants whose native language is other than English must present the results of the Test of English as a Foreign Language (TOEFL). Exceptions may be made if the applicant has earned a degree at an accredited US college or university. TOEFL requirements vary from program to program, ranging from 525 to 580. See Admission Requirements for international students under the department listing for specific TOEFL requirements.

English Instruction: Applicants who meet all admission requirements except English language proficiency can consider enrolling in the USM English Language Institute prior to academic enrollment. The Institutional TOEFL is offered periodically at the ELI for enrolled students. Its scores cannot be sent to other institutions. For information about the English Language Institute, write English Language Institute, Hattiesburg, MS 39406-5065, USA.

Admission Requirements: Appropriate graduate test scores are also required. The minimum GRE is 850. The minimum GMAT is 400. Official transcripts with degrees posted must be submitted for each school attended.

Financial Resources: In order to meet requirements for entry into the United States for study, applicants must demonstrate sufficient financial resources to meet expected costs of their entire educational program. Applicants must provide documentary evidence of their financial resources for university study since USM has no special funds for financial assistance to international students.

ADMISSION PROCEDURE:

1. Write to the Office of International Student Affairs, Hattiesburg, MS 39406-5151 USA for information and application forms to the University's graduate programs.
2. Complete the forms properly and return with a \$25.00 application fee to the address above. The application and supporting documents must be received no later than two (2) months prior to the registration date desired.
3. Have all official transcripts and diplomas from all former institutions attended sent to the Office of International Student Affairs. Please note unauthorized photo copies are NOT acceptable.
4. Have all appropriate official test scores sent to the Office of International Student Affairs.

A Certificate of Eligibility for Exchange Visitor Status (Form IAP-66 for a J-1 visa) or a Certificate of Eligibility for Student Status (Form I-20 for an F-1 visa) is issued only to those applicants who have been officially admitted to the University.

ADMISSION REQUIREMENTS AND PROCEDURES

Since applicants must always be admitted to a specific program within the Graduate School, all applications for admission to the Graduate School are closely reviewed and must be approved by the chair of the department in which the student intends to study, by the college dean, and by the Graduate Dean. Admission forms are procurable from and should be submitted to the Graduate Admissions Office.

The aptitude phase (verbal and quantitative sections) of the **Graduate Record Examinations (GRE)** is required of all applicants to the Graduate School except in the College of Business Administration, which requires the **Graduate Management Admissions Test (GMAT)**, and in some departments of the College of Education and Psychology, which accept the **National Teacher Examinations (NTE)** or the **Miller Analogies Test (MAT)**. Prospective students should plan to take the appropriate examination, given several times a year at a number of university testing centers, early in their senior year and request that a copy of their scores be sent to the Graduate Admissions Office.

The academic record, character, and conditions of application of the applicant must be in accordance with the rules and regulations of the Board of Trustees of State Institutions of Higher Learning and with the laws of the State of Mississippi. The applicant must have excellent moral character in conformity with the generally accepted standards customarily in effect in the University.

The University reserves the right to cancel the admission or registration of an individual whose attendance at the University, in the opinion of the appropriate administrative officer and the President, would not be beneficial to the student and/or to the institution.

It should be clearly understood that the admission requirements listed below represent the minimal standards set by the Graduate Council and that additional requirements and higher standards may well be stipulated by the various department chairs. Applicants should check for such requirements in the departmental section of this Bulletin.

TYPES OF ADMISSION TO MASTER'S PROGRAMS

Any student denied admission to the master's program may have his or her case reviewed by the Graduate Committee for Admissions and Credits. To initiate the review procedure, the student should send a written request to the Dean of the Graduate School.

I. Regular Admission

- A. The applicant must hold a baccalaureate degree from an institution approved by a recognized accrediting agency.
- B. The applicant must be eligible to re-enter in good standing the last college or university attended.
- C. The applicant must present evidence, by official transcript (two copies), of a grade point average of at least 2.75 (figured on an A equals 4.0 scale) for the last two years of undergraduate study, and a grade point average of at least 3.0 on undergraduate courses in the field of proposed graduate study. Any exception to this requirement must be cleared with the appropriate department chair, the dean concerned, and the Graduate Dean.
- D. Applicants must present acceptable test scores (GRE, GMAT, NTE or MAT). Consult specific departmental requirements for this information.
- E. The appropriate department chair, the college dean, and the Graduate Dean must be satisfied that the applicant shows promise of satisfying graduate degree requirements.

II. Conditional Admission

A student who does not meet the minimum admission standards for either grade point average or test scores (GRE, GMAT, NTE or MAT) may be admitted on a conditional basis in one of two ways:

- A. Present a test score acceptable for regular admission and a grade point average no lower than 2.50.
- B. Present a grade point average of 2.75 or above if the score is lower than that acceptable for regular admission.

Conditional admission can be given only upon the specific recommendation of the department chair, the college dean, and the Graduate Dean.

A conditional student at the master's level must maintain a grade point average of at least 3.00 on the first nine (9) semester hours of course work numbered 500 or above or on all courses taken while completing this nine hour requirement. This requirement must be met or the student will not be allowed to continue to seek a master's degree.

All courses taken to remove conditional admission must be taken on a campus of The University of Southern Mississippi. Upon recommendation of the department chair and approval by the Dean of the Graduate School, the conditional admission will be removed and the student reclassified as a regular student.

III. Non-Degree Graduate Student

Admission as a non-degree graduate student may be granted for any of the following reasons:

- A. He or she did not meet requirements for conditional or regular admission before the deadline.
- B. He or she may or may not be able to meet admission requirements but does not desire to work toward a graduate degree.
- C. He or she is enrolled in another university and desires to obtain credit from The University of Southern Mississippi to be transferred to the graduate school in which he or she is seeking a degree.

Regulations Governing Non-Degree Graduate Students

Even though a non-degree graduate student has been admitted to the University, he or she **has not** been admitted to any department or to any degree program. Moreover, no credit earned beyond the master's degree while classified as a non-degree student may be applied toward the doctoral degree. Unclear and non-degree students are not allowed to enroll in graduate courses in some departments. It is the responsibility of these students to check admission standards of the individual schools or colleges before enrolling in their courses.

To be allowed to continue as a non-degree graduate student, the student must consult with the department chair or academic adviser of the department in which he or she is taking courses during the first semester enrolled at the University regardless of whether or not the student plans to seek a degree.

A non-degree graduate student must hold a baccalaureate degree from an accredited institution.

No more than nine (9) semester hours earned while classified as a non-degree graduate student will be accepted toward a master's degree at The University of Southern Mississippi. A student must, therefore, gain conditional or regular admission before completing more than nine (9) semester hours of study for additional hours to be counted toward a master's degree.

TYPES OF ADMISSION TO ADVANCED GRADUATE STUDY

Any student denied admission to advanced graduate study may have his or her case reviewed by the Graduate Committee for Admissions and Credits. To initiate the review procedure, the student should send a written request to the Office of the Graduate School, Southern Station, Box 5024, Hattiesburg, MS 39406-5024.

Two advanced level programs are available for students who hold a master's degree and who wish to do additional graduate work. The first of these programs leads to the specialist's degree, and the second to the various doctoral degrees.

22/Admission Requirements

I. Regular Admission

For regular admission to advanced graduate study, a student must present a grade point average no lower than 3.25 for the specialist's program or 3.50 for the doctoral program on previous graduate work and an acceptable test score on the aptitude phase of the **Graduate Record Examinations (GRE)**. Some departments in the College of Education and Psychology accept the **National Teacher Examinations (NTE)** or the **Miller Analogies Test (MAT)** for admission to the specialist's program. All students seeking admission to a doctoral program must present scores on the aptitude phase of the GRE. Consult departmental requirements for the scores required for specific degree programs.

II. Conditional Admission

For conditional admission to a specialist's program, a student must present either (a) a grade point average of between 3.00 and 3.25 and an acceptable test score (GRE or, where applicable, the NTE or MAT), or (b) a grade point average no lower than 3.25 if the test score does not meet the acceptable score for regular admission. For conditional admission to a doctoral program, a student must present either (a) a grade point average of between 3.25 and 3.50 and an acceptable test score (GRE), or (b) a grade point average no lower than 3.50 if the GRE score does not meet the acceptable score for regular admission.

A conditional student at the advanced graduate level must maintain a grade point average of at least 3.25 on the first nine (9) semester hours of course work numbered 600 or above or on all courses taken while completing this nine hour requirement. This requirement must be met or the student will not be allowed to continue to seek an advanced degree.

All courses taken to remove conditional admission must be taken on a campus of The University of Southern Mississippi. Upon recommendation of the department chair and approval by the Dean of the Graduate School, the conditional admission will be removed and the student reclassified as a regular student.

For students who have their department's approval to change from the master's or specialist's program to a higher degree program, the chair and the dean should request the change in a written memorandum to the Graduate School Office. The Graduate School Office will verify that the minimum requirements for the higher degree are met.

III. Non-Degree Student

An applicant for advanced study may be admitted as a non-degree student; however, no credit earned as a non-degree graduate student may be applied to doctoral degrees.

Limitations on University Faculty Members

Members of the faculty of the University of Southern Mississippi above the rank of instructor cannot become candidates for a doctoral degree at this institution. They may, however, enroll for graduate courses. Faculty members of the rank of instructor may become candidates for doctoral degrees at The University of Southern Mississippi on the same terms as any other advanced graduate student candidate.

PROCEDURES FOR APPLYING FOR ADMISSION

- I.** Application materials are available from the Office of Graduate Admissions, Southern Station Box 10066, Hattiesburg, MS 39406-0066.
- II.** All credentials (application, recommendations, two official transcripts from each institution attended) must be submitted to the Director of Graduate Admissions by the deadline published in the University Calendar.
- III.** After all credentials are received, the Graduate Admissions Office will compute the applicant's grade point average and will forward the application and transcript to the appropriate department chair, college dean, and the Graduate Dean. As soon as the application has been processed by the department chair, the college dean concerned, and the Graduate Dean, the Office of Graduate Admissions will notify the applicant of the University's decision on the request for admission.

Permission for Undergraduate Seniors to Register for Graduate Credit

Exceptionally well qualified undergraduate students at The University of Southern Mississippi may apply to the Graduate Office for permission to take course work for graduate credit if they are within nine (9) semester hours of meeting bachelor's degree requirements as certified by the University Registrar. If the Graduate Dean approves, the student may then register for graduate courses up to a maximum of six (6) semester hours of graduate credit with a total course load not exceeding twelve (12) semester hours. The student must complete requirements for the baccalaureate degree within the first semester/term in which he or she registers for graduate courses. The student's application for admission to the Graduate School will not be given final approval until after he or she satisfies all requirements for the baccalaureate degree.

An undergraduate student from another institution desiring to take courses as listed above should have a transcript sent to the Dean of the Graduate School. The student should also file an application.

STUDENT EXPENSES

The University of Southern Mississippi is supported chiefly by legislative appropriations. Increases in student fees are put into effect only when public support funds are inadequate and no other recourse is available. Increases are made only for support of the institution or improvement of the activity program of the students; therefore the University must reserve the right to increase or modify fees and expenses without prior notice but with approval of the Board of Trustees of State Institutions of Higher Learning.

Fees and expenses are in the form of general tuition, room and board, and special fees.

GENERAL TUITION. This fee, together with the allocation from the legislative appropriation, is used for general support of the University. Athletic activities and UAC programs are not included for part-time students.

Full-time students for purposes of assessing fees are those who take nine (9) or more semester hours in Graduate School and twelve (12) or more semester hours in all other colleges. Graduate students enrolled for more than thirteen (13) semester hours will be assessed the applicable fee for each additional semester hour.

Clinical and hospital services covered by the health service charge included in the general tuition fee are limited to cases of ordinary illness. Services are provided within the limits of the professional, technical, and physical resources of the Clinic. The University does not assume responsibility in cases of extended illness or for treatment of chronic diseases. Cases requiring surgery must be handled by a physician and hospital of the student's choice and at the student's expense.

ROOM AND BOARD. The room and board fees are assessed for all students living in University controlled residence halls and those students living in fraternity houses. Board is available to all other students on an optional basis. Two meal plans are available; a seven-day 21 meal plan and a five-day 15 meal plan. Lite Line meals and diet counseling are available at no extra charge.

A room deposit of \$50.00 is payable in advance for the reservation of space in a residence hall. This amount is held as a damage deposit until a student withdraws from the residence hall. Graduate housing is available for graduate students on separate wings for men and women in Scott Hall during the fall and spring semesters. Upon withdrawal, the student must make an application to the Head Resident of the residence hall for refund of the \$50.00. A student accepting residence hall space will be financially obligated to pay for both fall and spring semesters rent due to the 9-month academic year contract. A rent refund will be made only upon withdrawal from the University.

TELEPHONE SERVICE. Telephone service in residence halls and family student housing is provided to students through the University telephone system. The cost of sharing **local telephone service** is included as a part of housing rent. For long distance service, students may use the University's system by completing an application

at the Campus Telephone Office, Hub Building, Room 104. Long distance telephone authorization and a caller identification will then be issued. Long distance calls are billed to the student on a monthly basis. Charges must be settled prior to leaving the University (including graduation, withdrawal, and semester breaks).

POST OFFICE BOX. The post office box fee is assessed for all students living in University-controlled housing. Those students living off campus may rent a post office box if they so desire.

STUDENT IDENTIFICATION CARDS. Effective Fall Semester, 1987, ID cards became a permanent card for each student. The fall semester (permanent) ID card will also be used for spring and summer semesters each year by revalidation. The same card must be kept, re-validated and used even when returning from a previous year or semester. Do not destroy, lose, bend or tamper with an ID card. Only one card will be issued at no charge during a five (5) year period. A fee of \$10.00 will be charged at the time a replacement card is made.

OTHER FINANCIAL INFORMATION. One-half of a student's total fees are due and payable at the time of registration. Students with University loans, grants, or scholarships may use those funds as payment for the first half of total fees. Loans, grants, scholarships, and checks made payable to the University must be applied to fees in full before a refund or change can be given. Fees deferred past the day to register each term will be billed monthly. A monthly service charge of 1.5% will be applied to the unpaid balance.

The University reserves the right to withhold readmission to a student until all delinquent accounts have been paid. In fact, all past due accounts will be included on registration fee invoices and monthly bills. Transcripts of credits will not be issued for students whose accounts are delinquent. All fees must be paid before a degree will be awarded.

Fines accumulated as a result of failure to adhere to the established procedures of the University, such as Library and Public Safety regulations, or any other policy establishing regulations for the protection of University property, shall become collectable by the Business Office, and, if not collected, shall constitute a delinquent account.

Students whose checks for registration fees are returned will be assessed the late registration fee of \$10.00 in addition to the \$6.00 returned check handling fee. Returned checks not paid promptly may result in dismissal from the University.

A registration fee of \$5.00 will be assessed all students.

A fee of \$3.00 for operation of the University Union and a fee of \$3.00 for the operation of the Intramural Field will be included in the fees of all full-time students. Part-time students will be assessed a fee of \$1.00 for Union and \$1.00 for Intramural Field Operations.

A \$2.00 per hour fee (limited to a maximum of \$20.00) for use of the University Clinic by part-time students is included in the per hour fee shown on page 27.

A special building fee of \$5.00 per student will be assessed each semester for the purpose of constructing a Health, Physical Education, and Recreation Complex. The students at the University of Southern Mississippi voted on April 10, 1984, in favor of this fee.

Courses requiring special fees and music fees are shown in the Special Fee listing.

RESIDENCE STATUS

LEGAL RESIDENCE OF STUDENTS: The definitions and conditions stated here are as required by state law in the classification of students as residents or nonresidents for the assessment of fees. Requests for a review of residency classification should be submitted to the Office of Admissions and Records; forms for this purpose are available from the Office of Admissions and Records.

A MINOR: The residence of a person less than twenty-one years of age is that of the father. After the death of the father, the residence of the minor is that of the

mother. If the parents are divorced, the residence of the minor is that of the parent who was granted custody by the court; or, if custody was not granted, the residence continues to be that of the father. If both parents are dead, the residence of the minor is that of the last surviving parent at the time of that parent's death, unless the minor lives with a legal guardian of his or her person duly appointed by a proper court of Mississippi, in which case his or her residence becomes that of the guardian.

AN ADULT: The residence of an adult is that place where he or she is domiciled, that is, the place where he or she actually physically resides with the intention of remaining there indefinitely or of returning there permanently when temporarily absent. Adult students who are residing outside of the State of Mississippi, but whose parents have moved to this state and have become residents, must establish residence in their own right. In determining residence for tuition purposes for persons who return to Mississippi after temporary departures such as school attendance, work elsewhere or military service, cognizance is taken of evidence showing continuity of state residence and demonstrated intent to return to the state.

REMOVAL OF PARENTS FROM MISSISSIPPI: If the parents of a minor who is enrolled as a student in an institution of higher learning move their legal residence from the State of Mississippi, the minor is immediately classified as a nonresident student.

TWELVE MONTHS OF RESIDENCE REQUIRED: No student may be admitted to the University as a resident of Mississippi unless his or her residence, as defined herein-above, has been in the State of Mississippi for a continuous period of at least twelve months immediately preceding his or her admission.

A student who has lived within the state for twelve months **following** his or her twenty-first birthday may establish residence in his or her own right by showing that he or she is living in the state with the intention of abandoning his or her former domicile and remaining in the State of Mississippi permanently, or for an indefinite length of time. Intent may be demonstrated or disproved by factors including, but not limited to, filing of Mississippi income tax returns, eligibility to vote in Mississippi, motor vehicle registration in Mississippi, possession of a Mississippi operator's license, place of employment, and self support.

RESIDENCE STATUS OF A MARRIED PERSON: A married person may claim the residence of his or her spouse.

CHILDREN OF PARENTS WHO ARE EMPLOYED BY THE UNIVERSITY: Children of parents who are members of the faculty or staff of the University may be classified as residents without regard to the residence requirements of twelve months.

MILITARY PERSONNEL ASSIGNED ON ACTIVE DUTY STATION IN MISSISSIPPI: Members of the armed forces on extended active duty and stationed within the State of Mississippi, except those military personnel whose active duty assignment is for educational purposes, may be classified as residents, without regard to the residence requirement of twelve months, for the purpose of attendance at the University. Resident status of such military personnel who are not legal residents of Mississippi, as defined above under **LEGAL RESIDENCE OF AN ADULT**, shall terminate upon their reassignment for duty in the continental United States outside the State of Mississippi.

CHILDREN OF MILITARY PERSONNEL: Resident status of children of members of the armed forces on extended active duty shall be that of the military parent for the purpose of attending the University during the time that their military parents are stationed within the State of Mississippi and shall be continued through the time that military parents are stationed in an overseas area with last duty assignment within the State of Mississippi, excepting temporary training assignments en route from Mississippi. Resident status of minor children shall terminate upon reassignment under permanent change of station orders of their military parents for duty in the continental

United States outside the State of Mississippi, excepting temporary training assignments en route from Mississippi.

CERTIFICATION OF RESIDENCE OF MILITARY PERSONNEL: A military person on active duty stationed in Mississippi who wishes to avail himself or herself or his or her dependents of the provisions of the paragraph titled **MILITARY PERSONNEL ASSIGNED ON ACTIVE DUTY STATION IN MISSISSIPPI** must submit a certificate from his or her military organization showing the name of the military member, the name of the dependent, if for a dependent, the name of the organization of assignment and its address (may be in the letterhead), that the military member will be on active duty stationed in Mississippi on the date of registration at the University; that the military member is not on transfer orders; and the signature of the commanding officer, the adjutant, or the personnel officer of the unit of assignment with signer's rank and title. A military certificate must be presented to the Registrar of the University each semester at (or within ten days prior to) registration for the provisions of the paragraph **MILITARY PERSONNEL ASSIGNED ON ACTIVE DUTY STATION IN MISSISSIPPI**, named above, to be effective.

LEGAL RESIDENCE OF A FOREIGN STUDENT: Students with permanent immigrant status or refugee status can establish residence in the state by meeting the provisions of the Mississippi Statute.

PETITIONS FOR CHANGE OF RESIDENCY: Petitions for change of residency must be made on or before the last day a student may register at the particular institution without penalty. Forms are available in the Office of Admissions and Records.

STUDENTS HOLDING ASSISTANTSHIPS: Non-resident students holding University financed assistantships will not be required to pay the non-resident fee during the time they hold such appointments.

REFUND POLICY:

(Tuition, out-of-state fees, student fees, book charges and special fees.)

A student who officially withdraws after enrollment may obtain a refund based on the following schedule:

Withdrawal prior to the first day of classes of any term 100% less a \$25 withdrawal fee.
Commencing with the first day that day classes meet each term:

Fall and Spring Semesters.
The first through the fifth working day 100% less a \$25 withdrawal fee.
The sixth through the fifteenth working day 75%
The sixteenth through the thirtieth working day 50%
After the thirtieth working day None.

Q and QQ Fall and Spring Semesters.
Prior to and including the last day to register for
or add Q and QQ courses 100% less a \$25 withdrawal fee.
The next five working days 75%
The next ten working days 50%
After the 50% period None.

Fall, Winter, Spring and Summer Terms.
The first through the fifth working day 100% less a 25% withdrawal fee.
The sixth through the tenth working day 75%
The eleventh through the twentieth working day 50%
After the twentieth working day None.

Q and QQ Summer Term.
Prior to and including the last day to register
for or add Q or QQ courses 100% less a \$25 withdrawal fee.
The next five working days 75%
The next five working days 50%
After the 50% period None.

Refunds are based on the assessment and not upon the amount paid by the student. The refund schedule above applies to students who drop to an hourly load below full-time or from an overload to full-time or below.

The \$5 registration fee is non-refundable.

Room and board fees are refunded on the basis of full weeks remaining in the session.

Appeals for refunds due to extenuating circumstances may be made in writing to: Vice President for Business and Finance, Southern Station, Box 5005, Hattiesburg, MS 39406-5005.

Students who find it necessary to withdraw from the University must submit written requests to the Dean of the Graduate School who will initiate the Withdrawal and Refund Form.

EXPENSES EACH UNIVERSITY SEMESTER/SESSION

(All fees are subject to change without notice.)

FULL-TIME STUDENTS	FALL, SPRING SEMESTERS	SUMMER SESSION
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FIXED FEES:

General Tuition.....	\$907.00	\$832.00
Building Fee—Health, Physical Education, and Recreation, (per student)	5.00	5.00
Registration Fee (per student).....	5.00	5.00
Housing Rent:		
Hillcrest, Elam Arms, Mississippi, Hattiesburg and Vann	630.00	420.00
Roberts, Scott, Jones, Pulley, Bolton, Wilber, Hickman and Bond	555.00	370.00
Pinehaven Apartments:		
1-bedroom	753.00	502.00
2-bedroom	803.00	536.00
3-bedroom	853.00	569.00
Board:		
5-Day Plan	455.00	265.00
7-Day Plan	510.00	305.00

Other Fees When Applicable:

Non-resident Fee	591.00	
*The <i>Southerner</i>	8.00	
**Post Office Box	10.00	10.00

PART-TIME STUDENTS—Each Semester Hour—

Hattiesburg Campus:

General Tuition—graduate student.....	93.00	93.00
General Tuition—undergraduate student.....	71.00	71.00
Building Fee—Health, Physical Education, and Recreation, (per student)	5.00	5.00
Registration Fee (per student).....	5.00	5.00

Non-resident Fee:

Graduate student	65.00
Undergraduate student.....	50.00

*Non-refundable. Charged the first semester attended each year to all full-time undergraduate students. Optional to all other students.

**Non-refundable. Optional to students living off campus.

Assessed: \$10.00 Fall; \$10.00 Spring; \$10.00 Summer.

General tuition, room, board, and post office, if applicable, are payable each semester/session.

SPECIAL FEES AND EXPENSES**Departmental Fees:**

BSC, all BSC laboratory courses	\$15.00	per course
CET 570L, 571L, 578L, 672	15.00	per course
CHE 511L, 527L, 528L, 561L, 562L	15.00	per course
CSS 500, 501, 502, 503, 630 631, 632, 633, 637	15.00	per course
CSC 620, 632, 638, 640	15.00	per course
ELT 511	15.00	per course
GLY, all GLY laboratory courses	15.00	per course
LS 505	15.00	per course
LS 516, 622, 623	7.50	per course
MAT 518, 519	15.00	per course
PSC 570L, 720L, 721L	15.00	per course
REF 516, 616, 622, 623	7.50	per course
SCE 532, 561	15.00	per course

Music Fees—Private lessons for other than full-time
music majors and for music majors taking private
lessons not required for the degree being pursued:

Each semester hour per instructor..... 35.00

Examinations and Degrees:

Miller Analogies Test	\$ 30.00	when applicable
Revalidation Examination	30.00	when applicable
Special Examination	3.00	when applicable

Application for Degree

Bachelor's	30.00
Master's	30.00
Specialist's	30.00
Doctoral	161.50*

Thesis binding per copy

10.00	when applicable
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Registration and Records:

Cooperative Education	25.00	when applicable
Late Registration	10.00	
Registration Fee for International Students (Non-refundable)	25.00	with application
Memorandum of Credits	1.00	each
Transcript of Credits	2.00	each

Division of Lifelong Learning and Resident Center**Resident Center**

Graduate Course	\$ 90.00	per semester hour
Resident Center—Laboratory fee	6.00	per course
Resident Center—Typing fee	5.00	per course

Extension Center

Graduate Course	90.00	per semester hour
Registration Fee (per student)	5.00	

Special fees are not normally refundable. However, requests for refunds of special
fees will be based on circumstances existing at the times of requests.

*Includes hood rental. Hoods may be purchased through the Bookstore.

AVAILABLE FINANCIAL ASSISTANCE FOR GRADUATE STUDENTS

At present the University has available some 400 master's and 150 doctoral University assistantships in all areas as well as fellowships provided by federal and private agencies. Though amounts may vary from department to department. University assistantships range from \$3400 to \$6000 per academic year at the master's level and from \$4800 to \$11,000 per academic year at the doctoral level and entail one-half time of teaching or research assignment. To maintain an assistantship a student must have an average of **B** or better each semester. General tuition and the non-resident fee are waived for graduate assistantship holders. The University also currently waives out-of-state tuition for students on sabbatical leave **with pay** from schools and colleges.

Inquiries regarding assistantships should be directed to the Dean of the Graduate School. Applications for assistantships must be filed by May 15.

The Perkins Loan Program (formerly NDSL), College Work-Study Program, and State Student Incentive Grant are also available to graduate students. (See the Financial Aid section of the **Undergraduate Bulletin** for detailed information about the Perkins & CWSP Programs.) Applicants for Perkins Loans and College Work-Study Program should apply by **March 15** (priority date) for loans and work to begin the fall term. Applications for the Perkins Loan Program, College Work-Study Program, and State Student Incentive Grants may be secured by writing the Director of Financial Aid. Students who reside outside the State of Mississippi should contact their State Department of Education to determine source of Insured Loans used by their state.

PLACEMENT SERVICES

The Office of Placement Services, located on the first floor of McLemore Hall, offers the student three types of employment opportunities while attending the University: part-time employment, career employment upon graduation, and employment through the cooperative education program. All employment opportunities are offered free to both the students and the prospective employer.

The Student Employment Division offers the student an opportunity to obtain part-time employment while enrolled as a regular student at Southern. The service is comprehensive in that it will involve jobs for work-study as well as non-work study both on and off campus.

The Career Employment Division provides assistance to graduating seniors, graduates, and alumni in obtaining career employment upon or after graduation. Students seeking career employment should register with Placement Services and establish a placement credentials folder during the last semester of their junior year or the first semester of their senior year. These credentials are valuable to prospective employers that are seeking information on college graduates for possible employment. The services may be used by the graduate as often as is needed.

The Cooperative Education Program affords the student the opportunity to gain a complete education with periods of work related to the student's major. The Cooperative Education Office assists in securing meaningful jobs that will give the student practical work experience and financial support to aid in his or her education.

For additional information, contact the:

Placement Services Office
Southern Station, Box 5014
Hattiesburg, MS 39406-5014
Telephone: (601) 266-4153

GENERAL ACADEMIC REQUIREMENTS

It is reasonable to assume that a graduate student accepts full responsibility for knowing the policies and regulations of the Graduate School and the departmental requirements relevant to his or her individual degree program.

Only the general academic regulations and requirements governing all graduate programs are given below. Specific requirements pertaining to individual degree programs are outlined within the department sections.

Course Work and Grading System

Courses open to graduate students are those numbered 500 or above.

Many courses have certain prerequisites. A student who wishes to register for a particular course must satisfy the department concerned that he or she has had preparation adequate for admission to the course.

The grading system in the Graduate School is as follows:

- A**— Indicates that the student's work is of unusually high quality.
- B**— Indicate that the student's work is of high but not exceptional quality.
- C**— Indicates that the student has met the minimum requirements for passing the course.
- D**— Indicates that the student's work is below that which is expected of a graduate student. A course in which the student has earned a grade of **D** will not apply toward a graduate degree. A student who earns more than six (6) semester hours in grades of **D** or below may not be considered as a candidate for a degree.
- E**— Indicates a course in progress. It is to be used only for thesis and dissertation credit while in progress.
- F**— Indicates that the student has failed the course. A student who accumulates more than three (3) semester hours of **F** grades will not be considered as a candidate for a degree.
- I**— Indicates an incomplete record. An **I** is treated as an **F** if not removed within one term of attendance.
- P**— Indicates completion of thesis and dissertation credit and is assigned only upon completion. Also used for grades in courses numbered 697 and 797.
- W**— Indicates withdrawal from a course passing.
- X**— Indicates failure to drop or withdraw properly before deadline. Upon completion of the drop/withdrawal form and payment of the appropriate fees, the Registrar is authorized to replace the grade of **X** with a **W**.

Fuller explanation of the grading system is in the **Undergraduate Bulletin**.

The general regulation that degree work must be completed within a six-year period applies to all course work.

A grade-point average of **B** or better is required of all candidates for graduate degrees by the time they complete the course-hour requirements for the degree.

On the recommendation of the student's committee or major professor, a student may retake one graduate level course in order to improve his grade point average.

Grade Review Policy

The instructor (defined as one who has the responsibility for a class, special problem, or thesis) has the authority in his or her class over all matters affecting the conduct of the class, including the assignment of grades. Student performance should be evaluated according to academic criteria made available to all students within the first two weeks of each semester. Grades should not be determined in an arbitrary or capricious manner.

When a student disagrees with the final grade given by an instructor, fair play requires the opportunity for an orderly appellate procedure. The procedure assures due process for both the instructor and student. For policies and procedures governing grade review, contact the dean of the appropriate college or school or the Vice President for Academic Affairs.

Course Loads

- I. Although the maximum load of a full-time graduate student is sixteen (16) semester hours, the normal load for a full-time graduate student is generally considered to be twelve (12) semester hours.
- II. The minimum load for a full-time graduate student is nine (9) semester hours for the purpose of living in Pine Haven, using the services of the Clinic, for veterans affairs, and other such requirements.
- III. Twelve (12) hours is the maximum load for a graduate fellow teaching one undergraduate class or its equivalent. In no case may the total hours involved in a student's program, including both the course work and the assistantship assignment, exceed sixteen (16) hours.
- IV. The courses numbered 697 and 797—**Independent Study and Research**—may be taken for any amount of credit with the exception that students who are not in residence but who are actively working on a thesis, research problem, or dissertation and consulting with the major professor or making use of the library or other University facilities must enroll for at least one (1) hour each semester.
- V. Students enrolling only for 698, 798, or 898 or courses entitled "Internship" such as CPY 861 should enroll for a minimum of three hours, or PSY 796 for a minimum of four hours.
- VI. Students enrolling only for 691, 791, or 891 should enroll for a minimum of three hours.

MASTER'S DEGREE REQUIREMENTS

A convenient checklist of master's degree requirements may be procured in the Graduate Office.

I. Credit Hours

A minimum of thirty (30) semester hours credit is required for any master's degree. Some departments require more than the minimum. Consult specific college and departmental requirements for additional information.

II. Time Limitation

The student must complete the master's degree within six calendar years from the date of initial enrollment in a graduate program. Six years is the maximum age allowed for graduate credits toward a master's degree. If more than six years are needed to complete requirements, the Graduate Dean, under extenuating circumstances, may revalidate over-age credit hours if the original credit was earned at The University of Southern Mississippi and if the dean of the college concerned approves the revalidation. The revalidation is secured by the student's successfully passing a special examination on the course. However, any student who fails to complete the master's degree program within the six-year time period becomes subject to any changes in degree requirements made at any date six years prior to graduation. The fee charged for the special revalidation examination is \$30.00 per course. The fee is to be paid before the revalidation examination is taken. Over-age extension courses cannot be revalidated.

III. Credit Hours Limitations

- A. A minimum of eighteen (18) semester hours must be earned on a campus of the University of Southern Mississippi.
- B. A minimum of fifty per cent of the credit earned at the University of Southern Mississippi must be taken on the campus from which the degree is awarded.
- C. A minimum of eighteen (18) semester hours must be in courses numbered 600 or above. Master of Business Administration degree candidates are permitted to take a maximum of one 500-level course.
- D. A total of no more than nine (9) semester hours of work earned as a non-degree student may be applied toward a master's degree. Please note **F** below.

- E. As many as six (6) semester hours of graduate credit from other accredited institutions may be transferred to the student's program with the approval of the appropriate department chair and the Graduate Dean provided that the course work transferred falls within the six-year period allowed for the degree.
- F. A total of no more than nine (9) semester hours of transfer work and non-degree work may be applied toward a master's degree.

IV. The Master's Committee

The student's work toward the master's degree is supervised by a departmental committee composed of a chair and two members recommended by the department chair and appointed by the Graduate Dean.

V. The Minor Field

If a minor field is required in the master's program, it shall consist of a minimum of nine (9) semester hours of course work.

VI. The Master's Thesis

Although the degree of Master of Arts entails the writing of a thesis (**698. Thesis. 6 hrs.**), the thesis requirement is optional with the departments for the Master of Science and the Master of Education degrees. Students intending to pursue a degree higher than the master's are encouraged to write a thesis. The Human Subjects Committee must approve the topic.

A separate bulletin outlining University requirements concerning the preparations of theses is available in the Graduate Office.

VII. Examinations

- A. The aptitude phase of the **Graduate Record Examinations** or the **Graduate Management Admission Test** is required for admission into the Graduate School. Individual departments may require the advanced area tests. Some departments in the College of Education and Psychology accept the **National Teacher Examinations** or the **Miller Analogies Test**.
- B. The Graduate School Foreign Language Test is required for some master's degrees, particularly the Master of Arts. Languages other than French; German, Spanish, and Russian must be approved by the department chair and the Graduate Dean. Students may procure the proper registration forms in the Office of the Director of Student Counseling. A student may satisfy the option of a foreign language by successfully completing at least nine (9) semester hours (or equivalent proficiency) in an approved foreign language with grades of C or better. The student may transfer the hours from an accredited institution upon admission to the Graduate School provided that the most advanced of the courses was taken within the last six (6) calendar years.
- C. In addition to regular examinations, final comprehensive examinations are required for master's degrees. The major department will determine whether the comprehensive examination will be written or oral or both. The written comprehensive, if required, will be prepared by the student's committee and will cover the area of the major field. If an oral examination is required, the chair of the student's committee will send written notices of the time and place of the examination. Comprehensive examinations, whether written or oral, will be administered no later than the last week of the semester/term in which the student expects to receive the degree and the results reported by the department chair to the University Registrar and to the Graduate Office no later than the last day for presenting signed theses to the Graduate Office. The examination may be administered earlier in the semester/term if the department so desires. A student who fails the comprehensive examination may not retake the examination until its next regular administration and may repeat the examination only once.

SPECIALIST'S DEGREE REQUIREMENTS

The specialist's degree earned in the Departments of Educational Leadership and Research, Business and Industrial Education, Curriculum and Instruction, Counseling Psychology and Counselor Education, English, Home Economics Education and Family Life Studies, Physical Education, and Special Education provides sixth-year programs designed to prepare students for positions in school administration, advanced technical education for business, teacher training, counseling, and to develop research and evaluation specialists for the public schools. Individual programs and requirements are fully described in the departmental sections of this **Bulletin**.

Students who are seeking the specialist's degree must meet all degree requirements relating to the master's degree, must earn at least thirty-three (33) semester hours beyond the master's degree, must write an acceptable thesis and defend it on an oral examination, or complete a field-based problem, and must complete one full-time semester/term of residence taking all nine (9) semester hours on the Hattiesburg Campus.

A maximum of nine (9) semester hours earned as a non-degree student may be applied to the specialist's degree.

DOCTORAL DEGREE REQUIREMENTS

A convenient checklist of doctoral degree requirements may be procured in the Graduate Office.

I. Credit Hours

All doctoral degrees entail a minimum of eighty-four (84) semester hours of course work beyond the bachelor's degree or fifty-four (54) semester hours of course work beyond the master's degree.

II. Time Limitations

Courses taken above the master's degree or its equivalent which will fit into the degree program but which are six or more years old at the time of admission to the advanced graduate program may be counted toward meeting degree requirements when recommended by the department chair and approved by the Graduate Dean. The comprehensive examination must be completed within a period of six years after the student has been admitted to advanced graduate standing at the University of Southern Mississippi.

III. Credit Hour Limitations

- A. A minimum of thirty-two (32) semester hours of work beyond the master's degree must be earned on the University's Hattiesburg Campus.
- B. Transfer of credit for graduate work done at other institutions must be approved by the department chair and Graduate Dean. Final evaluation of and acceptance of transfer credit will not be made until the student has been in residence for one semester/term. Transfer of credit for doctoral degree programs is limited to not more than six (6) semester hours or nine (9) quarter hours beyond the master's degree. Exceptions to this restriction may be made with the approval of the department chair and the Graduate Dean.
- C. Credit earned as a non-degree graduate student cannot be applied toward a doctoral degree.

IV. Residency

Residency "refers to a period during which the candidate is on the campus engaged in intensive study, sustained association with faculty members and other colleagues who share common scholarly and professional interests, attendance at seminars and colloquia, intensive reading and familiarization with library resources, consultation with specialists in other disciplines and resource centers, and the opportunity for broadened exposure to current intellectual issues as they are revealed in various campus offerings. In short, the requirement is not an inflicted ritual, but an opportunity."¹

The residency requirements for the doctoral degree can be fulfilled by the completion of 24 graduate hours of continuous study on the Hattiesburg Campus within the time limit of a minimum of two consecutive semesters (including the full summer session). During this period the student is obligated to devote full time to graduate work and to earn at least 12 semester hours of credit in each of the two semesters. Residency may begin only after the student is admitted to a doctoral program as a regular student.

A student should not attempt to fulfill the residency requirements if he or she is gainfully employed full-time.

A student who holds a fellowship or assistantship may fulfill the residency requirement by earning a total of 24 semester hours within three consecutive semester/terms.

While the above are generalized University residency requirements, students are reminded that many departments have additional residency requirements and some departments have specialized options to meet particular needs. Therefore, all residency plans must be approved in writing by the department chair before residency is begun.

¹R. Kruh, Council of Graduate Schools in the United States, September, 1977.

V. **The Doctoral Committee**

The student's work toward the doctoral degree is supervised by a departmental committee composed of a chair and four members recommended by the department chair and appointed by the Graduate Dean. Qualified individuals from outside the University may serve if they have specialized knowledge needed by the student.

VI. **The Minor Field**

If a minor field is required in the doctoral program, it shall consist of twelve (12) semester hours of course work and may consist of courses from a number of related areas.

VII. **Examinations**

- A. The aptitude phase of the **Graduate Record Examinations** or the **Graduate Management Admission Test** is required for admission into the Graduate School. Individual departments may require the advanced area tests.
- B. The **Miller Analogies Test** is a departmental option for doctoral students in the College of Education and Psychology.
- C. The foreign language and statistics requirements for the doctoral degree may be fulfilled in several ways:

1. The Doctor of Education degree does not require foreign language proficiency. However, the student must establish proficiency in statistics or computer science either by examination or by completing a prescribed course sequence, the credit hours for which do not apply toward the degree. Doctor of Music Education students should refer to doctoral programs in music education.
2. The Doctor of Philosophy degree requires either (a) proficiency in two languages, (b) proficiency in one language and in statistics or computer science, or (c) proficiency in one language and the completion of a nine-hour minor, the hours for which do not apply toward the degree. The procedure for satisfying proficiency in a specific computer language has been approved by the Graduate Council and is administered by the Department of Computer Science and Statistics.

A request to use a language (including native language) other than French, German, Spanish, or Russian shall present evidence of research reported in the language, e.g., a bibliography, and evidence of the purpose to which the language will be put in the doctoral dissertation and be approved at each level of: Major Professor, Department Chair, Dean of the College,

Language Committee of the Graduate Council, and the Graduate Council. A score of 460 or above is considered proficient on the standardized Princeton Examination in French, German, Spanish, and Russian.

Foreign language proficiency will be accepted from another institution provided the examination (GSFLT) was a part of a completed degree program. A student may satisfy the option of a foreign language by successfully completing at least nine (9) semester hours (or equivalent proficiency) in an approved foreign language with grades of C or better. The student may transfer the hours from an accredited institution upon admission to the Graduate School provided that the most advanced of the courses was taken within the last six (6) calendar years. After admission, courses taken to satisfy the language requirement must be taken at The University of Southern Mississippi or receive prior approval for specific courses and institution from the chair of the Advisory Committee (major professor), the chair of the Foreign Language Department, and the Dean of the Graduate School. The particular option followed by the student must have the approval of the department chair and the Graduate Dean. Since the purpose of the foreign language requirement is to assist in the conduct of the major research, the requirement will be met prior to the approval of the dissertation proposal.

- D. All students must have a written and/or oral doctoral qualifying examination in their field. This examination should be taken during the first semester/term of the student's enrollment and is designed both to judge the student's fitness to pursue doctoral work and to guide the advisory committee in planning the student's program. The qualifying examination may be retaken only once.
- E. At the completion of the course work and other examinations, the doctoral student is required to take a written and/or oral comprehensive examination in his or her major and minor field. A student who does unsatisfactory work on the comprehensive examinations may be granted a second examination at the next regularly scheduled time, or later. The committee will recommend the conditions to be met before the examination may be repeated. The comprehensive examinations may be retaken only once.
- F. After the dissertation has been accepted and after all required course work has been completed, but at least four weeks before the candidate is scheduled to receive the degree, a final oral examination on the dissertation and related fields will be conducted by the student's advisory committee and any other faculty members designated by the Graduate Dean. The examination will be open to any member of the graduate faculty.

VIII. The Dissertation

- A. The dissertation topic must be approved by the student's major professor and advisory committee and must be an original and significant contribution to knowledge in the chosen field. The Human Subject Committee must also approve the topic.
- B. A separate bulletin outlining University requirements concerning the preparation of dissertations is available in the Graduate Office.
- C. The student must complete a total of twelve (12) hours of 898 - **Dissertation**. The student should register for at least one (1) hour of 898 during the semester/term.

IX. Documents

The doctoral student must file a number of documents with the Graduate Office.

- A. After completing all the requirements for the doctoral degree other than the dissertation and at least one semester/term prior to graduation, the student must file two copies of the "Application for Candidacy" form with the Grad-

uate Office and one copy with the adviser, **before or at the same time** the application for degree is filed.

- B. The student should present two copies of the “Applications for Degree” form, properly stamped by the Business Office, to the Graduate Office during the semester/term preceding that of graduation.
- C. When completed, the student’s file in the Graduate Office should contain, in addition to the two documents described above, statements from the adviser and/or department chair appointing the doctoral committee, approving the dissertation prospectus, and verifying the successful completion of the qualifying and comprehensive examinations and dissertation defense. Also contained in the file should be statements of proficiency in language and/or statistics.

COLLEGE OF THE ARTS

Graduate Degrees 1990-1991

School/Department	Major	Degree
Master's Level		
Art	Art Education	Master of Art Education
School of Music	Music	Master of Music
	Church Music Emphasis	
	Conducting Emphasis	
	History and Literature Emphasis	
	Performance Emphasis	
	Theory and Composition Emphasis	
	Woodwind Performance and Pedagogy Emphasis	
	Music Education	Master of Music Education
Theatre and Dance	Theatre	Master of Fine Arts
	Acting Emphasis	
	Costume Design Emphasis	
	Directing Emphasis	
	Scenic and Lighting Design Emphasis	
	Technical Production Emphasis	
Doctor's Level		
School of Music	Music Education	Doctor of Music Education
		Doctor of Philosophy
	Performance and Pedagogy	Doctor of Musical Arts

COLLEGE OF THE ARTS

Harold Luce, Dean
Hattiesburg, MS 39406-5031
(601) 266-4984

The College of The Arts currently offers graduate degree programs at two levels: master's degree and doctoral degree. Descriptions of these programs can be located in the respective departmental sections.

Deficiencies

The College of The Arts retains the right to determine deficiencies in the preparation of any graduate student, regardless of the number of course credits accumulated. The College will recommend appropriate means of removing such deficiencies.

Examinations and Performance Evaluations

Some degree programs require entrance examinations and/or performance evaluations. Regular admission to any graduate program requires submission of the combined scores (Q + V) received on the **Graduate Record Examinations**. The departmental sections following in this **Bulletin** list general requirements for each degree program. Prospective students should confer with the department chair for full details. Approval of the graduate faculty in the appropriate department must be granted before a student will be accepted into a graduate degree program in any area of The Arts.

Final comprehensive examinations at or near the completion of the course work are required for all graduate degrees. The type, scope, and dates of the examinations vary, since they are matters of individual departmental policy. Each student pursuing a graduate degree should confer with his or her major professor and department chair for full particulars.

DEGREE PROGRAMS

Prescribed curricula for degree programs are listed below. Some provide great latitude and flexibility in arranging individual degree programs. Course selections must be approved by the student's major professor and graduate advisory committee. The approved course of studies for master's degree students must be filed with the student's department chair prior to the student's second registration. The student's major professor will assist in every way possible, but final responsibility for following all general and departmental regulations lies with the student. Prospective doctoral students must consult with the Coordinator of Graduate Studies prior to initial registration for detailed information about general and departmental regulations.

SCHOOL OF MUSIC

Peter Ciurczak, Director
Hattiesburg, MS 39406-5081
(601) 266-5363

Admission Requirements

For regular admission to master's degree programs, a student must have (1) a B average or better on music courses in the undergraduate degree, (2) an overall grade point average of at least 3.0 (A = 4.0) on the last two years of undergraduate study, and (3) a minimum total score (quantitative plus verbal) of 850 on the General Test of the **Graduate Record Examinations**. Acceptance to the School of Music requires students to meet expectations beyond these; see "Degree Candidacy."

Students seeking regular admission to doctoral level programs must have (1) a graduate grade point average of at least 3.5 (A = 4.0) on the previously earned master's degree, and (2) a minimum total score (quantitative plus verbal) of 1000 on the General Test of the **Graduate Record Examinations**.

Students who meet the respective grade point average requirements above but are unable to meet the GRE minimums may be considered for conditional admission.

Degree Candidacy: Master's Degrees

Degree Candidacy: Admission to graduate study does not imply admission to candidacy for a master's degree. To gain master's degree candidacy, one must:

- a) pass all Entrance Examinations, Special Examinations, and Candidacy Auditions required by the student's degree program before completing twelve (12) hours of graduate course work.
- b) complete at least twelve (12) hours of graduate course work relevant to one's degree plan with a cumulative grade point average of 3.0.

Students who have not done the above will be asked to withdraw from the graduate music program.

Earning Degree Candidacy: Master's Degrees

During the first term of full-time attendance, or before twelve (12) semester hours credit have been earned, each student seeking a master's degree will be required to (1) complete and sign a degree contract, (2) pass the entrance examinations and the performance audition appropriate to the degree sought, (3) have the Advisory Committee appointed, and (4) together with the graduate Advisory Committee, plan the total degree program. The student and all members of the Advisory Committee will sign a Degree Planning Sheet. The completed Degree Planning Sheet must be on file in the office of and approved by the Coordinator of Graduate Studies **before the student has earned twelve (12) semester hours**. If the Degree Planning Sheet is not on file, credit hours earned above twelve (12) semester hours will not be counted toward a master's degree.

Entrance Examinations and Auditions: All Degrees

Before the first term of residence, all graduate students must take diagnostic examinations in music theory and in music history and literature. Those who show proficiency in these areas must enroll in a graduate theory or history course other than MUS 620: Music Theory Survey and MUS 630: Music History Survey; for all others, MUS 620 and MUS 630 are required. A student with deficiencies may be required to take additional course work beyond the minimum required in the degree program.

Entrance examinations are administered on campus each Monday preceding the first day of classes in Fall, Spring, and Summer.

9:00 a.m. - Theory

10:30 a.m. - Music History and Literature

Entrance examinations are also administered through the mail. To make the testing process feasible, please find a proctor, preferably a teacher in a nearby college or university, to whom we can send copies of your examination. Send the name and address to Coordinator of Graduate Studies.

Qualifying examinations are required for all advanced degrees. Details can be found in the section of the **Bulletin** describing doctoral degrees in music.

Entrance auditions are also required for some degrees. These are:

Master of Music in Performance
in Church Music
in Conducting
in Woodwind Performance and Pedagogy

Doctor of Musical Arts in Performance

The Master of Music in Theory and Composition and the Doctor of Musical Arts in Composition require submission of representative scores of the prospective student's compositions.

All graduate students should consult the Coordinator of Graduate Studies for current, specific policies governing the advisement of students, the presentation of recitals, and the administration of comprehensive examinations.

Ensemble Participation: All Degrees

All full-time graduate students majoring in music and music education are required to participate in an ensemble during each term of residence. A maximum of two (2) hours of graduate credit earned in ensemble work may be counted toward a degree. The ensemble in which one participates will be determined by the student's advisory committee. Appropriate ensembles are: Orchestra, Band, Chamber Music, University Chorale, Jazz Lab Band, Jazz Singers, Collegium Musicum, Oratorio Chorus, University Singers, Chamber Singers, and Opera Theatre.

MASTER'S DEGREES

There are two master's degrees available in the School of Music, one with a major in music leading to the Master of Music degree, the other with a major in music education leading to the Master of Music Education degree. Emphasis areas in the Master of Music degree are: Performance, Church Music, Conducting, Music History and Literature, Theory and Composition, and Woodwind Performance and Pedagogy.

Regular admission procedures governing graduate entrance into The University of Southern Mississippi will be required. Details can be found in another section of this **Bulletin**.

Special Examinations and Auditions

All Special Examinations and Auditions must be passed before one can gain Degree Candidacy.

Comprehensive Examinations

Comprehensive examinations are required for **all** master's degrees.

The test will be prepared by the student's graduate advisory committee; it will cover the area of the major field. As a general rule, the Comprehensive Examination will be written.

The major professor will schedule the Comprehensive Examination; these tests may be administered at any time during the semester, but never later than ten school days before final examination week. The Coordinator of Graduate Studies must receive results of Comprehensive Examinations in time to notify the University Registrar and the Graduate Office no later than the last day for presenting signed theses to the Graduate Office.

A student who fails the Comprehensive Examination may repeat the exam once; the test must be repeated within one year of the first Comprehensive Examination.

Special Problems Courses

Special problems courses must be approved by the Music Graduate Committee. Petitions requesting permission to enroll are available in the Office of the Undergraduate and Graduate Coordinator (Performing Arts Center 209). Petitions must be submitted to the Coordinator by noon of the second day of classes.

Advisory Committee

During the first term of full-time residence or before twelve (12) hours of graduate credit have been earned, the student, the student's major professor, and the Coordinator of Graduate Studies, select those faculty who will serve as the student's Advisory Committee.

This committee will submit questions for the Comprehensive Examinations; it will also administer the test and grade it.

If a recital is required by the student's degree plan, the Advisory Committee will attend and evaluate the pre-recital audition; such must occur not later than fourteen (14) days before the date of the concert. (If decided by the Advisory Committee, pre-recital auditions are not required of those following the course of study for Performance-Piano Accompanying.) Should the pre-recital audition be judged unsatisfactory, another audition, at a date determined by the Advisory Committee, must take place.

The Advisory Committee will grade the degree recital as being Satisfactory (S) or Unsatisfactory (U); this grade must be indicated on the recital program and submitted to the Coordinator of Graduate Studies. Grades received on the Comprehensive Examination will not be submitted to the University Registrar or to the Graduate Office by the Coordinator of Graduate Studies until the required recital has been performed and has been evaluated as Satisfactory by a majority of the Advisory Committee.

In degree plans that provide flexibility and in those cases where a student is required to take additional course work beyond the minimum required by the degree, the Advisory Committee will counsel the student and, along with the Coordinator of Graduate Studies, plan the program of studies.

Master of Music Degree

Performance (32 hours)

Candidacy Audition:

All students must audition for an appropriate faculty jury. Unless stipulated otherwise (i.e., Brass Performance, Percussion Performance, Piano Performance, Voice Performance), an audition tape will suffice. This audition must be deemed Satisfactory before one can be declared a candidate for the master's degree (i.e., before one completes twelve (12) hours of graduate work; see Degree Candidacy). Early auditions are encouraged.

In all instances other than those in bold-face below, the audition must be at least thirty minutes in length and must include three works of contrasting style, preferably representing three different periods in music. (Repertory lists with representative works are available upon request. Write: Graduate Coordinator, School of Music, The University of Southern Mississippi, S.S. Box 5081, Hattiesburg, MS 39406-5081.)

Brass Performance: For those majoring in brass performance a tape will not suffice; the candidacy audition must be a full recital for the USM brass faculty.

Percussion Performance: For those majoring in percussion performance, the candidacy audition may be on cassette; the applicant should demonstrate proficiency on timpani and mallet keyboards and should include a multiple-percussion performance.

Piano Performance: For those majoring in piano performance, the audition must be memorized, be at least thirty minutes in length, and be performed before the piano faculty; it must include works from at least three different periods in music (e.g., Baroque, Classical, Romantic, Impressionistic, or Contemporary).

Voice Performance: An audition cassette will satisfy preliminary expectations, but before completing twelve (12) hours of graduate work, the student must also sing for a faculty committee and fulfill the requirements below.

Voice performance majors must demonstrate, by audition, (1) advanced vocal technique; (2) good diction in Italian, French, German, and English; and (3) good vocal quality and musicianship. The repertoire must be memorized and include (1) an aria from opera or oratorio; (2) a seventeenth- or eighteenth-century Italian song or aria; (3) a German Lied; (4) a French Melodie; and (5) a song in English.

Further, the student's transcript(s) must show grades of C or better in two years of foreign language (any combination of two of the following: German, French, and Italian) and at least one course in diction for singers. Students lacking these will be required to pass these courses in addition to the requirements for the degree. In lieu of course work, satisfactory performance on language exams, administered by the USM Department of Foreign Languages and Literatures, is acceptable.

Specific areas in which this degree may be earned are:

Bassoon	Organ	Trombone
Clarinet	Percussion	Trumpet
Euphonium	Piano	Tuba
Flute	Piano Accompanying	Viola
Guitar	Saxophone	Violin
Horn	String Bass	Violoncello
Oboe		Voice

Music History and Literature Electives	6
(Mus 630: History Survey (3) may be required)	
Music Theory Electives	6
(MUS 620: Theory Survey (3) may be required)	
Literature (primary performance medium)	2
Pedagogy (primary performance medium)	2
Applied Music (primary performance medium)	8
MUS 715: Recital*	3
Electives**	5

*Before a master's recital can be given, the performer(s) must present a pre-recital audition for his/her Advisory Committee; such must occur and be approved for performance no later than fourteen days before the concert date.

**May be in appropriate related fields.

Performance-Piano Accompanying:

Candidacy Audition:

Perform two contrasting selections from the standard piano repertoire. Additionally, present three chamber works representing three different periods in music; single movements are acceptable. One of these movements must be with at least three instruments including piano. The remaining two works should include a sonata with an instrument and piano and a work with voice and piano. The audition may be on video tape (VHS) or cassette recording.

MUS 540 or MUS 541: Vocal Literature	2
MED 550: Vocal Pedagogy	2
MUS 539: Diction (French, German, or Italian)	6
MUS 531: History of Opera	3
MUS 551: Chamber Music	3
Music Theory Electives (MUS 620: Theory Survey may be required)	6
Applied Music	8
Electives (MUS 630: History Survey (3) may be required)	2

Special Requirement: Accompany at least four full recitals; at least one must involve piano and two or more instruments.

Master of Music Degree

Church Music (32 Hours)

Undergraduate Prerequisite:

Bachelor's degree with a major in Church Music in a program equivalent to that at The University of Southern Mississippi.

Candidacy Audition:

Pass a piano proficiency examination comprised of simple accompaniments and hymns. Audition in one of the following major performance areas (see below):

- a) **Organists** must play a major work of Bach and at least one work from the 19th and one work from the 20th centuries. A cassette tape is acceptable.
- b) **Singers** must sing one oratorio aria and one of the following: German, Italian or French art song. A cassette tape is acceptable.
- c) **Conductors** must demonstrate conducting competency by directing an audition/rehearsal with one of the University choral ensembles. This must be accomplished by auditioning during the initial semester of one's graduate work or by scheduling an appointment before seeking admission.

MUS 559: Church Music Colloquium	3
MUS 760: Seminar in History of Church Music.....	3
Music History and Literature (MUS 630: History Survey (3) may be required).....	6
Music Theory (MUS 620: Theory Survey may be required)	6
Major Performance Area (Organ, Voice, Conducting)	7
MUS 715: Recital	1
Electives.....	6

Master of Music Degree**Conducting (35 Hours)**Candidacy Audition:

Demonstrate advanced conducting competency by directing an audition rehearsal with a University performing ensemble. Play a full band or orchestra score at the keyboard. (Request audition repertory list by writing: Coordinator of Graduate Studies).

Three years experience as a conductor and considerable experience as a member of a performing ensemble are expected. Students are encouraged to submit a video tape of their conducting.

In some cases, students with minimal deficiencies will be admitted into the program on a conditional basis and will be required to complete undergraduate courses (not for graduate credit) before proceeding as a Degree Candidate.

MUS 548 Choral Literature I (3) or	
MUS 552 Band Literature I (2).....	3-2
MUS 549 Choral Literature II or	
MUS 550 Symphonic Literature	3
MED 731 Graduate Conducting I	3
MED 732 Graduate Conducting II	3
Conducting Elective (Individual study with conductor of major ensemble).....	3
MUS 721 Analytical Techniques I or	
MUS 722 Analytical Techniques II	3
MUS 723 20th Century Comp. Techniques	3
MUS 731 Performance Practices I	3
MUS 732 Performance Practices II	3
Music History and Literature (MUS 630: History Survey may be required).....	3
MUS 692 Special Problems in Scoring/Arranging.....	3
Applied Music	2-3

Note: Knowledge of musical terms in French, Italian, and German must be demonstrated. Candidate must prepare and conduct at least one full-length concert with a major performing organization.

Master of Music Degree
Music History and Literature (35 Hours)

Undergraduate Prerequisites:

Baccalaureate degree with a major in music and at least one course in each of the following: 16th century counterpoint, 18th century counterpoint, composition, orchestration.

Special Examination:

Demonstrate for the music history faculty the ability to translate excerpts in at least one foreign language (i.e., French, German, Italian, or Spanish) before completing twelve (12) hours of graduate course work. Prior to the first registration, demonstrate writing ability by submitting a research paper, preferably in music.

MUS 702 Bibliography for Music Research.....	3
MUS 721 Analytical Techniques I	
or	
MUS 722 Analytical Techniques II	3
Music History Courses	9
Select from:	
MUS 533 20th Century Music (3)	
MUS 534 Ancient, Med., Renaissance Music (3)	
MUS 535 Baroque Music (3)	
MUS 536 18th Century Music (3)	
MUS 537 19th Century Music (3)	
Prescribed Electives: Group I	6
Select from:	
MUS 571 Seminar in Masterpieces of Music (3)	
MUS 731 Performance Practices I (3)	
MUS 732 Performance Practices II (3)	
MUS 761 Music Literature Seminar (3)	
Prescribed Electives: Group II	8
Select from:	
MUS 531 History of Opera (3)	
MUS 532 American Music (3)	
MUS 540 Vocal Literature (2)	
MUS 541 Vocal Literature II (2)	
MUS 542 Keyboard History and Literature (3)	
MUS 543 Keyboard History and Literature (3)	
MUS 546 Instrumental Literature I (2)	
MUS 547 Instrumental Literature II (2)	
MUS 548 Choral Literature I (3)	
MUS 549 Choral Literature II (3)	
MUS 550 Symphonic Literature (3)	
MUS 551 Chamber Music (3)	
MUS 559 British Studies (3-6)	
MUS 698 Thesis.....	6

NOTE: Special Problems (MUS 692) may be substituted for the above with permission of the major professor.
In addition to requirements above, the major professor and the Graduate Advisory Committee may specify that the student pass REF 601: Research: Introduction and Methodology (3).

Master of Music Degree
Theory and Composition (32 Hours)

Undergraduate Prerequisite:

Completion of a bachelor's degree that included counterpoint and orchestration.

Candidacy Audition:

Take and pass a keyboard skills examination by performing selections from Schumann, R., **Album for the Young**, Op. 68, and Bach, J.S., **371 Four-Part Chorales**. Submit, prior to the first registration, the score (and tape, if available) of a three-movement sonata, ten to fifteen minutes in length, for one or more instruments. One may send additional scores.

Advanced Composition	6
MUS 711 Pedagogy of Theory	3
Analytical Techniques	6
MUS 721 Analytical Techniques I (3) or	
MUS 722 Analytical Techniques II (3) or	
MUS 723 Analytical Techniques III (3)	
Applied Music	3
Music History and Literature Electives (MUS 630, History Survey (3), may be required)	6
MUS 698 Thesis	
or	
MUS 714 Composition Project	6
Electives (Cannot be MUS 620: Theory Survey)	2

Master of Music Degree**Woodwind Performance and Pedagogy (32 Hours)****Candidacy Audition:**

Audition for the appropriate jury (tapes are acceptable), showing performance ability on at least two woodwind instruments: flute, oboe, clarinet, saxophone, bassoon.

Primary Woodwind Instrument	6
Secondary Woodwind Instrument	4
Three remaining Woodwind Instruments	6
MUS 715 Recital (two recitals)	2
MED 734 Woodwind Techniques and Materials	2
MUS 692 Special Problems: Woodwind Literature	2
Music History and Literature Elective (MUS 630: History Survey (3), may be required)	3
Music Theory Elective (MUS 620: Theory Survey (3), may be required)	3
Electives	4

NOTE: Selection of specific primary, secondary and minor instruments is at the option of the student in consultation with his or her Graduate Advisory Committee and with approval of the auditioning committee. Normally, the student will be expected to select a primary/secondary combination from one of the following: single reed/double reed, single reed/flute, double reed/flute. Study of the primary and secondary instruments must embrace at least two semesters. Requirements for MUS 715 under this degree program will include two recitals, each receiving one semester hour credit. These recitals may consist of one chamber music program and one solo program, or a combination of chamber and solo music within both recitals. The primary and secondary instruments must be performed in each recital; the remaining instruments must be performed at least once, with a minimum of one minor instrument represented on each program.

Master of Music Education Degree (30 Hours)

Undergraduate prerequisite: Completion of a bachelor's degree in music education at The University of Southern Mississippi or an equivalent program.

REF 601 Research: Introduction and Methodology	3
REF 607 Curriculum Development	3
MED 725 Foundations and Principles of Music Education	3
Music Theory Elective (MUS 620, Theory Survey (3), may be required)	3
Music History Elective (MUS 630, History Survey (3), may be required)	3
Ensemble	2
Electives, 11 or which must be in Music Education	13

DOCTORAL DEGREES*

Doctor of Music Education Degree

Doctor of Philosophy in Music Education Degree

General requirements for the Doctor of Philosophy and Doctor of Music Education (the Doctor of Music Education general requirements are the same as the Doctor of Education degree) are found in another section of this **Bulletin**. The College of The Arts further stipulates the following requirements.

Admission: An applicant for admission to doctoral study in music education must possess a master's degree in music education, or its equivalent, from an approved institution. Each applicant must have at least three years of successful teaching experience.

The degree programs require regular admission procedures, additional procedures expected by the School of Music (i.e., Entrance Examinations, Special Examinations, and Auditions), qualifying examinations prior to or during the first term, appointment of the major professor and graduate advisory committee, and completion of an approved course of studies designed jointly by the student and the entire graduate advisory committee.

Research Tools: Candidates for the Doctor of Philosophy degree in Music Education must comply with the language requirements as specified for Doctor of Philosophy candidates in this **Bulletin**. A candidate for the Doctor of Music Education degree is required to demonstrate proficiency in statistics or computer science. At the discretion of the student's graduate advisory committee, this candidate may be required to demonstrate a reading knowledge of one modern foreign language.

Comprehensive Examinations:

Comprehensive Examinations are required for all doctoral degrees. See the Coordinator of Graduate Studies for the specifics as they pertain to each degree.

Degree Requirements

The following courses are required: REF 601 (or equivalent), MUS 702 (or equivalent), MED 750, 825, 826, and 898. The remaining course work will be determined by the candidate's qualifying examination, his or her interests, and the counsel of the major professor and graduate advisory committee. In planning this program, the following minimum distribution of graduate courses (including master's degree work) is required: Thirty (30) semester hours in music education, nine (9) semester hours in music history and literature, nine (9) semester hours in music theory, nine (9) semester hours in professional education, three (3) semester hours in studio performance study, and the remainder of the program in approved electives. Although this **Bulletin** states that eighty-four (84) semester hours are required for doctoral degrees, it should be clearly understood that some candidates will be unable to receive a degree on the basis of this minimum. The distinction implied by the degree and the traditions related to it require comprehensive knowledge and demonstration of a high degree of proficiency in the major field and related areas of study, as well as the ability to conduct advanced research.

Doctor of Musical Arts Degree

Performance and Pedagogy

Regular admission procedures governing entrance into The University of Southern Mississippi will be required. Details can be found earlier in the **Bulletin**.

Specific areas in which the D.M.A. may be earned are:

Bassoon	Oboe	Trumpet
Clarinet	Organ	Tuba
Composition	Percussion	Viola
Euphonium	Piano	Violin
Flute	Saxophone	Violoncello
Guitar	String Bass	Voice
Horn	Trombone	

All Areas Except Composition

Acceptance of a prospective student into the D.M.A. program assumes (1) a previously earned master's degree in performance from The University of Southern Mississippi or an equivalent degree from another approved institution, or (2) a previously earned master's degree with any other major, provided the auditioning committee is satisfied that the student is qualified to pursue the D.M.A. at the University of Southern Mississippi. A high level of performance proficiency and extensive knowledge of repertoire are expected.

Students entering the D.M.A. program will be required to present an audition. Additionally, the student will be required to take qualifying examinations prior to or during the first term of enrollment.

The D.M.A. student will be required to take MUS 702, 731, 732, and 898. The remainder of the course work will be determined in light of the student's qualifying examination, entrance audition, his or her interests and/or professional goals, and the counsel of the major professor and graduate advisory committee. In planning this program, the following minimum distribution of graduate courses (including master's degree work) is required: Thirty (30) semester hours in performance music studio study and recitals, fifteen (15) semester hours in music history and literature, nine (9) semester hours in music theory, and the remainder of the program in approved electives which may include six (6) semester hours in a cognate field of study. Three recitals will be required in addition to the entrance audition. One must be a solo recital, one a lecture recital, and the third chosen from the following options: (a) performance of a concerto with orchestra, (b) performance of a major role in an opera, (c) performance of a major role in an oratorio, (d) a full-length recital of chamber music, or (e) a second solo recital. As a general rule, not more than one doctoral recital may be presented by a candidate during any academic term, nor more than two during any nine-month period. Rare exceptions will be permitted, but under rigidly controlled procedures. See the Coordinator of Graduate Studies for details.

One language will be required in the degree. Others may be required by the major professor and graduate advisory committee.

The D.M.A. dissertation, required for completion of the degree, consists of two parts. Part I must include all recital programs, concert programs, program notes, and lectures presented during the student's residency. Part II must be a written thesis giving evidence of the candidate's ability to make a scholarly investigation of a limited scope.

Composition Area

Acceptance of a prospective student into the D.M.A. program in the composition area assumes a previously earned master's degree in composition or the equivalent, provided the composition faculty is satisfied that the student is qualified to pursue the D.M.A. at The University of Southern Mississippi. A high level of proficiency in composition and extensive knowledge of literature are expected.

Students applying for entrance into the D.M.A. program in the composition area must submit a portfolio containing representative scores and/or recordings of their compositions prior to the first term of enrollment at The University of Southern Mississippi. Additionally, the student will be required to take qualifying examinations prior to or during the first term of enrollment.

The D.M.A. student will be required to take MUS 702, 731, 732, and 898. The remainder of the program will be determined in the light of the student's portfolio evaluation, his or her qualifying examination, his or her interests and/or professional goals, and the counsel of the major professor and graduate advisory committee. In planning this program, the following minimum distribution of graduate courses (including master's degree work) is required: Thirty-nine (39) semester hours in composition and music theory, fifteen (15) semester hours in music history and literature, six (6) semester hours in a related field of study, and the remainder of the program in approved electives. The student

will write compositions totaling at least two (2) hours playing time. Up to thirty (30) minutes previously written compositions may be accepted as part of these two hours. Compositions will be for orchestra, band, chorus, ensembles, and soloists demonstrating competence in writing for all orchestral and band instruments as well as for the solo voice. The music should encompass levels of difficulty from junior high school to professional standards. The composer will write commentaries for each work, including program notes and rehearsal suggestions. All works, including parts, must be in duplicative format.

One recital of the composer's works will be given, with the composer commenting on each composition.

One language will be required, chosen from French, German, or Italian.

The D.M.A. dissertation, required for completion of the degree, will consist of the commentaries, program notes, and a full score of a work composed during the student's doctoral study.

DEPARTMENT OF ART

Jerry Walden, Chair
Hattiesburg, MS 39406-5033
(601) 266-4972

The Department of Art offers a program leading to the Master of Art Education degree. Regular admission to the program requires a minimum undergraduate grade-point average of 3.0 in the applicant's major field of study as well as a minimum combined score of 900 on the **Graduate Record Examinations** (verbal and quantitative sections). Other requirements unique to the degree program are described below. The University of Southern Mississippi Department of Art is a fully accredited member of the National Association of Schools of Art and Design.

Master of Art Education Degree

Undergraduate prerequisites for the Master of Art Education degree in the Department of Art are: (1) completion of a bachelor's degree in art education at The University of Southern Mississippi or an equivalent program, or (2) completion of any degree in the visual arts, or (3) satisfaction of Mississippi Class A teacher certification requirements in art.

Each student must demonstrate a studio proficiency appropriate to previous study by presenting a portfolio for review by the faculty and chairman of the Department of Art. The review will determine recommendations for meeting the nine (9) semester hour block in art education and studio areas. The portfolio should be submitted no later than three weeks prior to the initial registration so that proper guidance can be given in advising. Portfolios submitted later will be reviewed after the student has been enrolled in ART 600. Deficiencies which are identified may be removed by passing the non-degree credit course ARE 600 and/or ART 600 with a grade no lower than B and/or taking course work for degree credit as prescribed by the student's major professor and graduate advisory committee.

Requirements for a Master of Art Education Degree are as follows:

	Hours	Hours
ARE 601, 603, 606, 625, 626	15	REF 601, 607 6

Nine (9) hours of the remaining course work must be selected in art and art education courses (art history, drawing, painting, ceramics, crafts or ARE 698-Thesis). A student

choosing to pursue a non-thesis program will normally be required to take six (6) of the nine (9) hours in one discipline. The course work in lieu of the thesis must be approved by the student's major professor and graduate advisory committee.

The required minimum total is thirty (30) semester hours.

DEPARTMENT OF THEATRE AND DANCE

Judith Midyett, Chair
Hattiesburg, MS 39406-5052
(601) 266-4994

The University of Southern Mississippi Department of Theatre and Dance is an accredited member of the National Association of Schools of Theatre. Theatre requirements are in accordance with the published regulations of this Association.

The Department of Theatre and Dance offers a program leading to the Master of Fine Arts degree.

To be eligible for admission, a student must have completed a minimum of twenty-one (21) semester hours of undergraduate course work in theatre or theatre related areas. Those who do not meet the minimum entrance requirements may be admitted but will be expected to take undergraduate courses to cover deficiencies. It should be emphasized that admission to the Graduate School does not imply acceptance of the student as a candidate for a graduate degree. (See general admission requirements and procedures as set forth in this **Bulletin**.)

Upon being admitted into a graduate program, the student will be assisted by the department graduate coordinator in selecting an appropriate graduate advisory committee composed of three faculty members, one of whom will serve as major professor.

Before the end of the first week of classes, an entrance interview and audition/portfolio review is required of all students entering a master's program.

Master of Fine Arts Degree in Theatre

The objective of the Master of Fine Arts curriculum is to develop the educated performer by offering sound theory and intensive practical training simultaneously. Students in the Master of Fine Arts programs will elect a plan of study with specialization(s) in one or two of the following areas: acting, directing, scenic and lighting design, costume design, and technical production.

Regular admission to a Master of Fine Arts program requires: (1) submission of the combined scores (850) (QV) received on the **Graduate Record Examinations**; (2) a grade point average of at least 3.0 in the undergraduate major area; and (3) acceptable performance auditions or portfolio evaluations. Directing and acting students will be required to demonstrate their proficiency in "Showcase" performance during the first semester in residence. Design emphasis students must present a portfolio for review by the faculty prior to the initial registration. If no portfolio is available, a student may be admitted on a conditional basis until an acceptable minimum proficiency is determined.

Proficiency reviews will be required of all M.F.A. candidates at the conclusion of their second semester in residence.

The Master of Fine Arts program requires six semesters of full-time graduate study and the completion of a minimum approved program of sixty (60) hours. It is recommended that the M.F.A. student fulfill at least one of the required semesters by enrollment in the Repertory Theatre program. The candidate will satisfactorily complete a creative project in his major area of emphasis and defend it orally before the Theatre Arts faculty.

COLLEGE OF BUSINESS ADMINISTRATION

**Graduate Degrees
1990-1991**

School/Department	Major	Degree
School of Professional Accountancy	Accounting	Master of Professional Accountancy
Finance and General Business	Business Administration	Master of Business Administration

COLLEGE OF BUSINESS ADMINISTRATION

Tyrone Black, Dean

William A. Sirmon, Associate Dean

Hattiesburg, MS 39406-5021

(601) 266-4659

Douglas E. Wolfe, Assistant Dean, Academic Programs

Hattiesburg, MS 39406-5096

(601) 266-4663

PURPOSE

One of the objectives of the College of Business Administration is to provide quality education at the master's degree level for managers, as well as for those who intend to pursue managerial careers. To achieve this objective the College has recruited qualified graduate faculty and limits its students to those who demonstrate good potential for doing graduate work.

DEPARTMENTS AND GRADUATE DEGREE PROGRAMS

Within the College of Business Administration the following graduate degree programs are offered: a Master of Business Administration and a Master of Professional Accountancy. These programs offered on the Hattiesburg Campus are accredited by the American Assembly of Collegiate Schools of Business. Inquiries may be addressed to Assistant Dean, Academic Programs, College of Business Administration, Southern Station, Box 5096, Hattiesburg, MS 39406-5096.

On the Hattiesburg Campus a number of graduate fellowships are available. Students with good undergraduate records are encouraged to apply at the time they apply for admission to the Graduate School. To be considered, the student must be officially admitted to the graduate program and must normally have a 3.0 average on the last two years of undergraduate work and an acceptable score on the **Graduate Management Admission Test (GMAT)**.

ADMISSION STANDARDS

Regular admission is normally granted to applicants who graduated from colleges and universities approved by a recognized accrediting agency. Successful applicants must normally have a total of at least (a) 1,050 points based on the formula: 200 times the grade point average of the last two years of undergraduate study (4.0 scale), plus the GMAT score or (b) 1,000 points based on the formula: 200 times the overall undergraduate grade point average plus the GMAT score. In either (a) or (b) above the GMAT score must normally be greater than 430 points. Either low grades on important subjects or a low test score may prevent admission even if the standard is met. Applicants should have an overall undergraduate GPA of at least 2.50.

Conditional admission is granted to students whose GMAT and GPA do not meet the above criteria but are considered good prospects for graduate study. The conditional graduate student must make grades of **B** or better on each of the first three graduate courses taken to qualify for regular admission. Only a limited number of students are admitted on this basis.

A student may not enroll in any courses reserved exclusively for graduate students in the College unless official admission to one of the programs has been attained prior to registration. Also, students seeking degrees from other colleges and schools may not enroll in graduate level business courses unless they are officially admitted to a specific USM graduate program.

Students transferring from other graduate schools, including USM regional campuses, must meet the admission requirements outlined above. At the time of admission up to

six (6) semester hours of appropriate transfer credit for courses taken in these other graduate programs may be accepted. A grade of B or above is required for transfer credit. Once admitted to the program, students will be expected to complete all of their degree requirements on the Hattiesburg campus.

Admission forms and GMAT applications are available in the Office of the Assistant Dean, Academic Programs.

DEGREE PROGRAMS IN BUSINESS ADMINISTRATION

Master of Business Administration

The Master of Business Administration program is primarily designed to prepare the student for a position of responsibility in business or industry. However, it also is used as preparatory graduate work for the doctoral degree or for teaching in junior colleges where a teaching certificate is not required. The program is broad in nature and aimed at developing competence in overall management from the generalist's perspective, which is firmly grounded in the basic business disciplines.

Individuals with technical or other specialized degrees frequently discover that career advancement requires managerial abilities. The M.B.A. program provides a year of foundational courses in the functional areas of business and the basic tools of analysis and decision making. This preparation is followed by a second year of courses aimed at expanding the student's knowledge and abilities with a coordinated and integrated curriculum focused on analysis and application of this knowledge to business problems and decision making. This two-year option is designed for students with little or no previous course work in business administration.

Students who graduated from an undergraduate business program may complete their M.B.A. through a one-year option, provided they have retained proficiency in such areas as mathematics, statistics, and the use of computers. If the course work was done several years ago or if there is weakness in one or more of the functional areas, any deficiency must be removed before beginning the second-year graduate courses.

Students entering the one-year option should have completed the following course work in their undergraduate program: Principles of Accounting (6 hours), Principles of Economics (6 hours), Statistics (6 hours), Principles of Management (3 hours), Principles of Marketing (3 hours), Business Finance (3 hours), Legal Environment of Business (3 hours), and Management Information Systems (3 hours). A grade of C or better is normally required in all foundational courses.

All applicants must have completed mathematics through applied calculus and be computer literate, including the ability to make use of word processing, spread sheet, and data base management software packages.

The first year of the two-year program includes the following courses:

FALL	Hours	SPRING	Hours
MBA 500	3	MBA 550	3
MBA 511	3	MBA 560	3
MBA 520	3	MBA 570	3
MBA 530	3	MBA 580	3
MBA 545	1.5	MBA 585	1.5
MBA 546	1.5		
Total: 15		Total: 13.5	

The second year of the two-year program, as well as the one-year option, includes the following courses:

SUMMER	Hours	FALL	Hours	SPRING	Hours
MBA 600	3	MBA 620	3	MBA 660	3
MBA 605	3	MBA 630	3	Emphasis courses	6
MBA 610	3	MBA 640	3	MBA 685	1.5
		MBA 650	3	MBA 686	1.5
		MBA 545	1.5		
Total: 9		Total: 13.5		Total: 12	

The two Emphasis courses may be selected from those offered in Economics, Finance, Management, or Marketing. Also, students in the one- and two-year programs must earn one and two hours respectively of University Honors Forum credit.

Students entering the two-year option will be admitted in the FALL semester ONLY, and may complete the program in 21 months on a full-time basis. Students entering the one-year option will be admitted in the SUMMER or FALL semester ONLY, completing the program in one calendar year on a full-time basis. Part-time students will be admitted on the same semester schedule, completing the program in two or four years, depending on which option is needed.

Degree Requirements

A student completing the two-year option must complete a minimum of 61.5 semester hours of prescribed work with a B average for all graduate courses. A student completing the one-year option must complete a minimum of 34.5 semester hours of prescribed work with a B average for all graduate courses. All general requirements of the Graduate School must be met, the appropriate curriculum requirements completed, and an oral or written examination passed unless excused for exceptional performance.

SCHOOL OF PROFESSIONAL ACCOUNTANCY

James R. Crockett, Director
Hattiesburg, MS 39406-5178
(601) 266-4641

The School of Professional Accountancy is a school within the College of Business Administration. Emphasis is placed on the preparation for professional careers in both the public accounting and management accounting areas. The objective of the School is to provide more depth and breadth in Accounting and related subjects than can be accomplished in a four-year program. Enrollment in the School's graduate program is limited to those students who show a high probability of success.

Master of Professional Accountancy

The School offers one degree—the Master of Professional Accountancy. The program leading to the M.P.A. is essentially the culmination of a five-year program. A student who earns the Bachelor's degree with a major in one of the accounting options may normally complete the M.P.A. program with one year's additional work. A minimum of thirty (30) hours of graduate work is required.

Students with a variety of educational backgrounds may enter the program. Students who have a baccalaureate degree from an accredited college or university must either transfer or take the following business environment and tool courses:

Algebra, Applied Business Mathematics, and Calculus (9 hours)	Business Finance (3 hours)
Principles of Economics (6 hours)	Legal Environment of Business (6 hours)
Business Statistics (6 hours)	Money and Public Policy (3 hours)
Principles of Management (3 hours)	Administrative Policy and Decision Making (3 hours)
Principles of Marketing (3 hours)	Management Information Systems (3 hours)

The following lower division accounting courses are also required:

Principles of Accounting
(6 hours)

Intermediate Accounting
(6 hours)

Advanced Accounting (3 hours)

Cost Accounting (6 hours)

Income Tax Accounting (3 hours)

Auditing (3 hours)

Systems Analysis and
Design (3 hours)

Professional level courses common to all candidates are as follows:

ACC 410* or 510-Auditing II

ACC 402 or 502-Advanced
Accounting II

ACC 405 or 505-Current Accounting
Theory and Research

ACC 430 or 530-Federal Income
Tax Accounting II

ACC 440 or 540-Contemporary
Problems in Accounting

ACC 605-Advanced Accounting
Theory

ACC 610-Advanced Problems in
Public Accounting

ACC 620-Seminar on
Controllershship and
Accounting Systems

ACC 630-Tax Seminar I

ACC 631-Tax Seminar II

*Courses with both a 400 and 500 designation may be taken at either the undergraduate (400) level or the graduate (500) level. A minimum of ten courses must be taken at the graduate level with at least seven courses numbered over 600 and at least two business courses outside of Accounting.

Recommended non-Accounting Courses:

MBA 600-Business and Society, MBA 605-Problems in Marketing Management, MBA 620-Macroeconomics Analysis for Managers, MBA 630-Operations Management, MBA 650-Business Modeling.

Admission to the Program

Applicants must meet the admission requirements of the College of Business Administration and must have a minimum overall grade point average of 2.75 with a minimum average of 3.0 in at least twelve hours of accounting courses numbered above 300.

Graduation and Retention Standards

Students must earn a minimum 3.0 grade average in courses numbered 500 and above as a condition for graduation. If a student earns a 2.0 or lesser grade average in any semester, or if his or her grade average for required courses falls below 2.5, he or she is placed on probation by the School. After one semester of probation, a student is denied admission to further professional accounting courses unless significant improvement can be shown during the probationary semester.

COLLEGE OF EDUCATION AND PSYCHOLOGY

Graduate Degrees

1990-1991

Department	Major	Degree
Master's Level		
Business and Industrial Education	Business Education	Master of Education,
		Master of Science
		Business Teacher Education Emphasis
		Distributive Education Emphasis
		Vocational Teacher Education Emphasis
	Industrial and Vocational Education	Master of Science
Counseling Psychology and Counselor Education	Counseling and Personnel Services	Master of Education
		College Counseling/Personnel Emphasis
		School Counseling Emphasis
		Counseling Psychology
Curriculum and Instruction	Educational Curriculum and Instruction	Master of Science
		Master of Education,
		Early Childhood
		Education (MED) Emphasis
		Elementary Education (MED) Emphasis
		Reading (MED) Emphasis
		Secondary Education (MED) Emphasis
		Post-Secondary Reading (MED) Emphasis
		Reading (MS) Emphasis
		Secondary Education (MS) Emphasis
		Adult Education
		Educational Administration and
Educational Leadership and Research	Supervision	Master of Education
		Master of Education
		Supervision of Instruction Emphasis
		Educational Media and
		Technology*
Psychology	Research and Evaluation	Master of Education
		Master of Science
		Psychology
		Master of Arts,
		Master of Science

*Admission to program suspended

Department	Major	Degree
Special Education	Special Education	Master of Education Emotionally Disturbed Emphasis Gifted Emphasis Mentally Retarded Emphasis Specific Learning Disabilities Emphasis
Specialist's Level		
Business and Industrial Education	Education (BED/EDS)	Specialist in Education Business Education Emphasis
	Education (IVE/EDS)	Specialist in Education Industrial and Vocational Education Emphasis
Counseling Psychology and Counselor Education	Education (CPY/EDS)	Specialist in Education Counseling and Guidance Emphasis
Curriculum and Instruction	Education (CUI/EDS)	Specialist in Education Early Childhood Education Emphasis Elementary Education Emphasis Reading Emphasis Secondary Education Emphasis
Educational Leadership and Research	Education (ELR/EDS)	Specialist in Education Adult Education Emphasis Administration of Occupational Education Emphasis Curriculum and Supervision Emphasis Educational Media and Technology Emphasis* Educational Media and Technology/ Library Science Emphasis* Educational Research Emphasis Elementary Administration Emphasis General Administration Emphasis Higher Education Administration Emphasis School Business Management Emphasis Secondary Administration Emphasis
Special Education	Education (SPE/EDS)	Specialist in Education Special Education Emphasis

*Admission to program suspended

Department	Major	Degree
Doctor's Level		
Counseling Psychology and Counselor Education	Counseling Psychology	Doctor of Philosophy
Curriculum and Instruction	Education (CUI)	Doctor of Education Doctor of Philosophy
	Business Education Emphasis Elementary Education Emphasis Secondary Education Emphasis	
Educational Leadership and Research	Education (ADE)	Doctor of Education Doctor of Philosophy
	Adult Education Emphasis	
	Education (EDA)	Doctor of Education Doctor of Philosophy
	Education Administration and Supervision Emphasis Higher Education Administration Emphasis	
Psychology	Psychology	Doctor of Philosophy
	Clinical Psychology Emphasis General-Experimental Psychology Emphasis Industrial/Organizational Psychology Emphasis School Psychology Emphasis	
Special Education	Education (SPE)	Doctor of Education Doctor of Philosophy
	Special Education Emphasis	

COLLEGE OF EDUCATION AND PSYCHOLOGY

James O. Schnur, Dean
W. Bruce Holliman, Assistant Dean
Hattiesburg, MS 39406-5023
(601) 266-4568

Paul Peddicord, Assistant Dean
Hattiesburg, MS 39406-8206
(601) 266-4477

Requirements for Admission to Graduate Programs

Admission to the Graduate School for study in the College of Education and Psychology requires a specific grade point average and an appropriate GRE score. (See General Admission Requirements.) Any individual who does not meet the general admission requirements may request additional consideration of his or her application by appealing to the appropriate department chair. A student may be admitted to a graduate program if he or she receives the approval of the department chair, the Dean of the College of Education and Psychology, and the Dean of the Graduate School.

Anyone holding a bachelor's degree from an accredited institution may be admitted as a non-degree graduate student. A non-degree graduate student is not considered to be in a graduate program leading to a degree. If the student demonstrates proficiency in graduate work, he or she may make application for a graduate degree program and, if approved, the student may use up to nine (9) semester hours of work taken as a non-degree graduate student in the degree program.

Those applicants who wish to study for a master's degree in any area of professional public school work should study for the Master of Education degree, and therefore, must first hold or qualify to hold a Class A teaching certificate based on a baccalaureate degree in the area in which they wish to concentrate. A Master of Education degree applicant who does not yet qualify for an A certificate may be admitted to the Graduate School, but must meet the requirements of the State of Mississippi for an A certificate in teaching before the degree will be awarded. However, upon the recommendation of the departmental chair, the Dean of the College of Education and Psychology may waive the requirements of satisfying certification requirements for those students currently employed or preparing for employment in junior or senior colleges, non-public institutions, or positions not requiring certification. In the event that certification requirements are waived, it is incumbent upon the student to recognize this limitation upon the scope of the areas within which he or she might seek employment in the future.

In the College of Education and Psychology, the minimum requirement for a master's degree is thirty (30) semester hours; the specialist's degree requires a minimum additional thirty-three (33) semester hours; and the doctoral degree requires a minimum of eighty-four (84) semester hours beyond the bachelor's degree.

DEPARTMENT OF BUSINESS AND INDUSTRIAL EDUCATION

William B. Burns, Chair
Hattiesburg, MS 39406-5036
(601) 266-4446

The Department of Business and Industrial Education offers graduate degree programs which encompass two academic areas of study: (1) Business Education and (2) Industrial and Vocational Education. The Business Education component of the Department of Business and Industrial Education offers programs of study which lead to the Master of Science or the Master of Education degrees in Business Education, certification in Dis-

tributive Education, and the Specialist's and Doctoral degrees in Education with an emphasis in Business Education.

Persons who plan to teach business subjects in community/junior and senior colleges, who desire certification in Cooperative Office Education, or who desire additional training for employment in the business world can find a program suited to their professional goals. It is recommended that a person pursuing any one of the above programs, except certification in Distributive Education, have an undergraduate major in Business Education.

The Industrial and Vocational Education component of the Department of Business and Industrial Education offers graduate programs of study which lead to the Master of Science degree in Industrial and Vocational Education and the Specialist's degree in Education with an emphasis in Industrial and Vocational Education. These programs provide teachers of Industrial, Technology, and Vocational Education subjects post-baccalaureate preparation designed to serve as a foundation for professional development, career advancement, and further graduate study. Teachers completing these programs qualify for the appropriate AA or AAA teaching certificate in the State of Mississippi.

MASTER'S PROGRAMS

Admission Requirements

To be considered for regular admission to the master's degree programs, an applicant must (a) have a minimum grade point average of 2.75 on the last two years of undergraduate education; (b) present a total score of at least 850 on the Aptitude Test (verbal plus quantitative) of the **Graduate Record Examinations**, or a total score of at least 1125 on the common and area examinations of the **National Teacher Examinations (NTE)**, or a total score of at least 1965 for the three tests (Communication Skills, General Knowledge, and Professional Knowledge) of the Core Battery of the NTE, or a minimum score of 39 on the **Miller Analogies Test**; and (c) have the approval of the department chair, Dean of the College, and Dean of the Graduate School.

An applicant who fails to meet the criteria for regular admission may be considered for conditional admission if he or she (a) meets one of the standardized test score requirements for regular admission and has a grade point average of at least 2.50 for the last two years of undergraduate study or, when the standardized test score is below that required for regular admission, has a grade point average of 2.75 or higher for the last two years of undergraduate study and shows promise of successfully completing degree requirements; and (b) has the approval of the department chair, Dean of the College, and Dean of the Graduate School.

The appropriate master's degree will be conferred upon candidates who (1) meet the admission requirements listed above, (2) complete the special curriculum requirements outlined below, and (3) pass an oral examination (an oral examination is required in Business Education).

Master of Science Degree in Industrial and Vocational Education

All students pursuing a major in Industrial and Vocational Education must complete the following requirements:

	Hours
IVE 605, 607, 611	9
IVE 692	3
REF 601, 607	6

Electives—Twelve (12) semester hours. Subject to the approval of the department chair, elective courses are to be taken as follows:

1. Three (3) semester hours must be taken in Industrial and Vocational Education.
2. The remaining nine (9) semester hours may be taken in related areas.

**Master of Science Degree
in Business Education**

All students pursuing an emphasis in Business Teacher Education must complete the following requirements:

	Hours
REF 601 and 607.....	6
FIN 625, ECO 570, and MGT 620 plus two Business Administration electives	15
BED 651, 653 or 655, and 669.....	9

**Master of Education Degree
in Business Education**

	Hours
REF 601 and 607.....	6
ECO 570, MGT 620 plus one Business Administration elective	9
BED 651, 652, and 669.....	9
Select two from: BED 580, 653, 655, or 608.....	6

All students pursuing a specialization in Distributive Education must complete the following requirements:

REF 601 and 607.....	6
BED 551, 553, 554, 555 OR 580, 608, 652, 669	12
MKT 625, 635, 640, and 650.....	12

These specialized courses, representing 30 semester hours, along with six additional hours in marketing, management, or economics (either undergraduate or graduate courses) will meet educational requirements for additional vocational certification as coordinators of distributive education programs.

It is recommended that REF 601, the research course, be taken early in each program.

**CURRICULUM FOR COORDINATORS OF
VOCATIONAL BUSINESS EDUCATION PROGRAMS**

Persons who hold a Bachelor of Science degree with a major in Business Teacher Education may take the courses listed below to become certified as coordinators of business education programs.

Curriculum Requirements

Vocational Business Education:	Hours
BED 552 and BED 553	6

**CURRICULUM FOR COORDINATORS OF
COOPERATIVE VOCATIONAL EDUCATION
(Includes D.O. Co-Op)**

Prerequisite: Standard certificate in Industrial Arts/Technology Education, Trade and Technical Education, Vocational Home Economics, or Vocational Agriculture.

Add-On AA Certification Requirements:

Six (6) semester hours from the following courses:

	Hours
BED 553 Techniques of Coordination.....	3
IVE 504 Problems of the Coordinator	3
IVE 533 Curriculum Construction for Cooperative Education	3

OR

A Master of Science Degree in Industrial and Vocational Education which includes the above six (6) semester hours in lieu of "electives."

SPECIALIST'S DEGREE PROGRAMS

Admission Requirements

To be considered for regular admission to the specialist's degree programs, the applicant must (a) hold a master's degree; (b) have a minimum grade point average of 3.25 on previous graduate work; (c) present a total score of at least 900 on the Aptitude Test (verbal plus quantitative) of the **Graduate Record Examinations**, or a total score of at least 1175 on the common and area examinations of the **National Teacher Examinations** (NTE), or a total score of at least 1975 for the three tests (Communication Skills, General Knowledge, and Professional Knowledge) of the Core Battery of the NTE, or a score of at least 44 on the **Miller Analogies Test**; and (d) have the approval of the department chair, Dean of the College, and Dean of the Graduate School.

An applicant who fails to meet the criteria for regular admission may be considered for conditional admission if he or she (a) meets one of the standardized test score requirements for regular admission and has a grade point average of at least 3.0 on previous graduate work or, when the standardized test score is below that required for regular admission, has a grade point average of 3.25 or higher on previous graduate work and the department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

The specialist's degree will be conferred upon candidates who (1) meet the admission requirements listed above, (2) complete the special curriculum requirements outlined below, (3) pass the comprehensive examination, and (4) complete a research problem. The student pursuing a specialist's degree within the Department of Business and Industrial Education has an option to choose a 30-hour program plus a field problem for an additional three (3) hours or a 27-hour program plus a thesis for an additional six (6) hours for a minimum of 33 hours of credit beyond the master's degree. If one chooses the thesis option, he or she must defend the thesis before the degree can be conferred.

Specialist's Degree in Education

with an Emphasis in

Industrial and Vocational Education

All students pursuing a Specialist's degree in Education with an emphasis in Industrial and Vocational Education must complete the following requirements:

	Hours
IVE 701, 702, 703, 704.....	12
CPY 714, or PSY 670.....	3
REF 602*	3
IVE 794	3
*REF 601 required prerequisite	

In addition to the above twenty-one (21) hour core, a minimum of four (4) elective courses for twelve (12) semester hours is required. These courses of study may be selected from the content area of interest, goal-related interest, or other cognitive areas with the approval of the department chair.

**Specialist’s Degree in Education
with an emphasis in
Business Education**

All students pursuing a Specialist’s degree in Education with an emphasis in Business Education must complete the following requirements:

	Hours
REF 602.....	3
Select one from the following suggested courses:	
EDA 600, 710, 711, 712; CPY 610, 611; ADE 545, 576	3
BED 680, 701, 750, and 760	12
Select 3 or 4 from:	
BED 580, 608, 651, 653, 655	9 or 12
BED 794 Field Problem.....	3
BED 798 Thesis	6

*The student pursuing a Specialist’s degree in Education with an emphasis in Business Education has an option to choose a 30-hour program plus a field problem for an additional three hours or a 27-hour program plus a thesis for an additional six hours for a minimum of 33 hours credit beyond the master’s degree.

DOCTORAL DEGREE PROGRAM

Business Education Emphasis

A business education student seeking either the Doctor of Education or the Doctor of Philosophy degree may major in Education with an emphasis in Business Education and earn the degree through the Department of Curriculum and Instruction.

Admission Requirements

To be considered for regular admission to a doctoral program, an applicant must have (a) grade point average of at least 3.5 on previous graduate work; (b) a total of at least 1000 on the Aptitude Test (verbal plus quantitative) of the **Graduate Record Examinations** (GRE); and (c) the approval of the department chair, the Dean of the College, and the Dean of the Graduate School.

An applicant who fails to meet the criteria for regular admission may be considered for conditional admission if he or she (a) meets the GRE score requirement for regular admission and has a grade point average of at least 3.25 on previous graduate work; and (b) has the approval of the department chair, the Dean of the College, and the Dean of the Graduate School.

The appropriate doctoral degree will be conferred upon candidates who satisfactorily meet admission requirements, complete the special curriculum requirements outlined below, pass oral and written examinations, and successfully defend the dissertation.

A student pursuing a doctoral degree with an emphasis in Business Education must complete the following requirements:

	Hours
Secondary Education	
See core requirements listed for doctoral degree in secondary education	31
Add language if Ph.D. degree is desired	
Business Administration:	
(related field)	6
Specialized Subject matter	24

The student pursuing the doctoral degree with an emphasis in Business Education must earn a minimum of 75 graduate semester hours beyond the master’s degree. More

than 75 hours may be required in order to satisfy deficiencies which may exist in the student's background and preparation. Of the total hours required of a doctoral student with an emphasis in Business Education (to include the master's degree program), 45 hours must be taken in Business Education.

Scholarship and Examination

In addition to achieving acceptable scores on admission examinations and maintaining satisfactory scholarship through the course work, a candidate will be required to perform satisfactorily on both written and oral comprehensive examinations in Business Education.

Time Limit for Completion of Work for Degree

A candidate must complete the requirements for the doctoral degree within six years from the date of admission to candidacy.

DEPARTMENT OF COUNSELING PSYCHOLOGY AND COUNSELOR EDUCATION

John D. Alcorn, Chair
Hattiesburg, MS 39406-5012
(601) 266-4602

The Department of Counseling Psychology and Counselor Education offers programs at the master's, specialist's and doctoral levels. Curricula are designed to provide specialized preparation at the respective levels appropriate to populations served in health service and educational settings.

The master's program in Counseling Psychology (Mental Health/Agency Track) has received accreditation from the Council for Accreditation of Counseling and Related Educational Programs. The M.Ed. emphasis in School Counseling is accredited by the National Council for The Accreditation of Teacher Education.

The doctoral program in Counseling Psychology has been fully approved by the Committee on Accreditation of the American Psychological Association.

MASTER'S DEGREE PROGRAMS

Admission General admission to a master's program is based upon one's previous academic record, scores on admissions tests and recommendations. Equivalent scores from the **National Teacher Examinations** or the **Miller Analogies Test** may be substituted for admission to the M.Ed. program in Counseling and Personnel Services. To be considered for regular admission to a master's degree program, an applicant must present: (a) a minimum grade-point average of 3.00 on the last sixty (60) semester hours of undergraduate coursework and (b) a combined score of 850 on the aptitude section of the GRE (verbal plus quantitative) with a minimum verbal score of 400. A limited number of students who do not meet requirements for regular admission will be considered for conditional admission. However, these admissions will usually be reserved for applicants from underrepresented populations who present strong evidence of potential for successfully completing a master's degree. Total numbers admitted to various programs at any given time are based on spaces available. The selection committee takes into account factors such as date of application, GRE scores, undergraduate grade-point-average and letters of recommendation.

Removal of conditional status will be granted with the completion of nine semester hours of USM graduate work with a minimum of a B average and recommendation of the admissions committee.

Application for Graduation Graduation is based upon:

1. Completion of required course work in respective program.
2. Satisfactory completion of comprehensive examination.
3. Satisfactory performance in the counseling practica.

The Master of Science in Counseling Psychology. The curriculum tracks are designed to accommodate students who wish to: (a) develop the research competencies requisite for doctoral study in counseling psychology or (b) prepare for psychological counseling roles in human services agencies. Completion of the M.S. degree does not guarantee admission to the doctoral degree program offered by the Department.

Required Core Courses	Hours
CPY 612, 614, 630, 662, 710, 711, 712, 713, 714, 762.....	27 - 30
Research Tools: CPY 650, 750, 694, REF 761, 762	6 - 15
Internship: CPY 696	6
Foundations, Environmental/Specialized Studies	12 - 21
Total Requirements:	60 - 63

Note: Course planning is undertaken with backgrounds and needs of students in mind. The curriculum may be slightly modified to meet individual needs of students (with approval of adviser). Detailed curriculum guides for Mental Health/Agency Track and Research Track are available upon request. Students completing Research Track must have GRE (Verbal + Quan) scores of at least 1000 and permission of the faculty.

The Master of Education in Counseling and Personnel Services This program is designed to meet the professional preparation needs of individuals who expect to work in the field of counseling and personnel services. Emphases are provided in school counseling and college personnel work. A Class A Standard Teaching Certificate is a prerequisite for certification as a school counselor and as a vocational counselor. This program is designed to meet AA requirements for certification as a guidance counselor in Mississippi. Students may enter College Personnel Emphasis from any undergraduate degree major.

Required Core Courses (21 hours)	Hours
CPY 523 or 710, 611, 612, 614, 663; REF 601 and 602.....	21
Required for School Counseling Emphasis (9-12 hours)	
CPY 610, 662, 711; REF 607*.....	12
Total Requirements:	30-33

*Mississippi certification only.

Required for College Personnel Emphasis (9 hours)	Hours
CPY 640 and Electives	9
Total Requirements:	30

SPECIALIST’S DEGREE

The Specialist’s degree in Education with an emphasis in Counseling and Guidance is offered in the College of Education and Psychology. A description of the basic program is provided elsewhere. The curriculum for the Counseling and Guidance emphasis will meet Mississippi requirements for AAA certification as a Guidance Counselor. Program plans are developed on an individual basis by the student and a departmental adviser.

DOCTOR OF PHILOSOPHY

The department offers the Ph.D. degree in Counseling Psychology. A scientist-practitioner model provides the basic orientation for program planning. Such a model emphasizes the interrelatedness of psychological theory, research, and practice. Minimum course requirements for the doctorate are ninety (90) semester hours not including research tools, dissertation, and internship. Forty-two (42) semester hours are included in the professional core and a minimum of thirty (30) semester hours is required

in psychological foundations. Electives may be utilized to develop emphasis areas of specialization.

Admissions

The department admits an average of eight new students each year (based on a ratio of approximately one student for each full-time equivalent faculty member). Students may be admitted to a predesignated doctoral class opening upon completion of a bachelor's degree or upon completion of a master's degree. Applications are processed once a year after February 1 for fall admission. In reviewing applications, the committee will consider the following:

- (a) Aptitude scores on the **Graduate Record Examinations**
- (b) Previous grade point average
- (c) Recommendations of professors and professional employers/supervisors
- (d) Previous work experience
- (e) Ratings from on-campus interview
- (f) Research and publications

Minimum Admission Requirements

Regular: A minimum grade point average of 3.50 on previous graduate work and a combined score of 1000 on the aptitude section of the **Graduate Record Examinations**.

Conditional: Where granted, conditional admissions will be reserved for applicants from underrepresented populations who do not meet all of the regular admission requirements but who present evidence of **outstanding** potential for doctoral study. Such applicants should have a grade point average of at least 3.50 on previous graduate work and a GRE score no lower than 900 or a grade point average between 3.25 and 3.50 and a GRE score of at least 1000. See listing in current volume of **Graduate Study in Psychology** for description of student characteristics.

Qualifying Examinations

The examinations will usually be taken during the second semester of the third year of graduate study (or first year of post-master's study).

Comprehensive Examinations

Comprehensive examinations will be scheduled by individual appointment during or after the last semester in which the student is enrolled in core courses listed on the approved course of study and will consist of written and/or oral questions.

Residency

Completion of the minimum residency requires full-time on-campus study for two consecutive semesters. Due to the intensive nature of the training involved in the program, it is highly recommended that students not apply until they can remain in residency for at least two-three years. During the residency, students are expected:

1. To carry a minimum course load of twelve (12) hours per semester for at least the first year.
2. To participate in a variety of credit and non-credit departmental activities including three semesters of CPY 810, laboratory and practicum experiences, individual case work, field trips and other related professional activities.
3. To be relieved of job responsibilities with off-campus employers.

Internship

One year of pre-doctoral internship, (1900-2000 hours) experience is required. Doctoral internships are off-campus, involve full-time responsibilities, and are usually paid.

DEPARTMENT OF CURRICULUM AND INSTRUCTION

Mildred E. Kersh, Chair
Hattiesburg, MS 39406-5057
(601) 266-4547

The Department of Curriculum and Instruction includes the areas of elementary education, early childhood education, reading, and secondary education. The department offers the following graduate degrees, majors, emphasis areas, and specialization areas:

MASTER OF EDUCATION

Major

Educational Curriculum and Instruction

Emphasis Areas

Early Childhood Education
Elementary Education
Reading
Post-Secondary Reading
Secondary Education

Specialization Areas (Secondary)

Art	Music Education
Biology	Physical Education
Chemistry	Physics
English	Science
Foreign Language	Social Studies
Mathematics	Speech Communication

MASTER OF SCIENCE

Majors

Educational Curriculum and Instruction

Emphasis Areas

Reading
Secondary Education

Specialization Areas (Secondary)

See areas under **Master of Education/Specialization Area (Secondary)**.

SPECIALIST IN EDUCATION

Major

Education

Emphasis Areas

Early Childhood Education
Elementary Education
Secondary Education

Specialization Areas (Secondary)

See areas under **Master of Education/Specialization Areas (Secondary)**, excluding Foreign Language.

Reading

Specialization Areas (Reading)

Curriculum and Supervision in Reading

Clinical Reading

College Reading/Study Skills

DOCTOR OF EDUCATION AND DOCTOR OF PHILOSOPHY**Major**

Education

Emphasis Areas

Elementary Education

Specialization Areas (Elementary)

Early Childhood Education

Reading

Secondary Education

Specialization Areas (Secondary)

Biology

Reading

Chemistry

Science

English

Social Studies

Mathematics

Business Education

Students seeking graduate degrees in Curriculum and Instruction should be aware that certification at advanced levels in Mississippi is contingent on satisfaction of all lower level certification requirements. Students entering the Curriculum and Instruction Master's program, who desire AA level Mississippi certification in a given area must meet all A level requirements for that area. Individuals who are matriculating at USM from out of state should become aware of the certification requirements of those states where they wish to be certified and should work with an adviser to see that those requirements are met. Certification and degree requirements are separate procedures. A degree from USM in a given curricular area does not automatically insure Mississippi certification in that area or at that level.

The Department of Curriculum and Instruction strongly recommends that a student gain one year of teaching experience before completing the master's degree program. No student will be eligible to receive a specialist's degree until he or she has completed at least two years of teaching experience. Three years of teaching experience is a requisite for a doctor's degree.

MASTER'S PROGRAMS

The Department of Curriculum and Instruction offers a Master of Education degree with a major in educational curriculum and instruction with emphasis areas in early childhood education, elementary education, reading, post-secondary reading, and secondary education. The Master of Science degree is offered with a major in educational curriculum and instruction with emphasis areas in reading and in secondary education.

The program of study at the master's degree level is designed to increase the professional competency of the classroom teacher and to provide the course work necessary to meet standards of teaching certification at this advanced level.

The master's degree program requires admission to a particular program, appointment of a graduate adviser, completion and submission of four copies of the application form for a master's degree at least one semester in advance of the date of graduation, successful completion of the comprehensive examination, and completion of all course work requirements.

ADMISSION REQUIREMENTS

To be considered for regular admission to a master's degree program, an applicant must have (a) a grade point average of at least 2.75 (figured on a scale where A equals 4.0) for the last two years of undergraduate study; (b) a total score of at least 850 on the Aptitude Test (verbal plus quantitative) of the **Graduate Record Examinations**, or a total score of at least 1125 on the common and area examinations of the **National Teacher Examinations** (NTE), or a total score of at least 1965 for the three tests (Communication Skills, General Knowledge, and Professional Knowledge) of the Core Battery of the NTE, or a score of at least 39 on the **Miller Analogies Test**; and (c) the approval of the chair of the department, the Dean of the College, and the Dean of the Graduate School.

An applicant who fails to meet the criteria for regular admission may be considered for conditional admission if he or she (a) meets one of the standardized test score requirements for regular admission and has a grade point average of at least 2.50 for the last two years of undergraduate study or, when the standardized test score is below that required for regular admission, has a grade point average of 2.75 or higher for the last two years of undergraduate study and shows promise of successfully completing degree requirements; and (b) has the approval of the chair of the department, the Dean of the College, and the Dean of the Graduate School.

MASTER'S DEGREES

**Master of Education with Emphasis
in Early Childhood Education**

	Hours
REF 601, 604, 607.....	9
CIE 606, 770, 772, 776, 777, 778.....	18
CIE 698 (Thesis) or CIE 728.....	3

Both the thesis program and the non-thesis program consist of thirty (30) required hours. Substitutions for required courses must be approved in advance and in writing by the department chair or the graduate coordinator.

**Master of Education with Emphasis
in Elementary Education**

	Hours
REF 601, 604, 607.....	9
CIE 606, 705, 724, 725, 776	15
Elective.....	3

Select one course from the following for three (3) hours: CIE 706, 727, 728, 729, 768, 778; EDA 600, 620; GHY 617; REF 660; SCE 730, 731, 732, 733.

CIE 698 (Thesis) or CIE 728.....	3
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Both the thesis program and the non-thesis program consist of thirty (30) required semester hours. Substitutions for both required courses and designated electives must be approved in advance and in writing by the department chair or the graduate coordinator.

**Master of Science and Master of Education
with Emphasis in Secondary Education**

Plan I (Thesis Program-MS Degree)		Plan II (Non-Thesis Program-MEd Degree)	
	Hours		Hours
REF 601, 604, 607.....	9	REF 601, 604, 607.....	9
CIS 700	3	CIS 700	3
CIS 698 (Thesis).....	3	CIS 708 or CIS 754.....	3

Both the thesis program and the non-thesis program consist of thirty (30) required semester hours. Substitution for required courses must be approved in advance and in writing by the department chair or the graduate coordinator.

In addition to the fifteen (15) semester hour core requirement of Plan I and Plan II listed above, a specialization of at least fifteen (15) semester hours must be taken in one of the following areas:

Art	Music Education
Biology	Physical Education
Chemistry	Physics
English	Science**
Foreign Language	Social Studies***
Mathematics*	Speech Communication

*The student selecting mathematics as a specialization area may not use any mathematics course designated as a mathematics refresher course.

**The student selecting science as a specialization area may use, with the approval of his or her adviser, a combination of biological and physical science courses; however, a minimum of nine (9) semester hours of graduate credit must be taken in an area of science for which the student holds a Class A endorsement. A student who holds Class A endorsements in two or more areas of science may qualify for Class AA certification in two areas by completing nine (9) semester hours of graduate credit in one of the endorsement areas and six (6) semester hours of graduate credit in the other endorsement area. No more than three (3) hours of science education (SCE) courses may be used. To be used in an endorsement area, the SCE course must be in that area.

***The student selecting social studies as a specialization area may take courses in any one or a combination of the following disciplines: history, geography, political science, sociology, and economics.

Master of Science and Master of Education with Emphasis in Reading

Plan I (Thesis Program-MS Degree)	Plan II (Non-Thesis Program-MEd Degree)
Hours	Hours
REF 601, 604, 607..... 9	REF 601, 604, 607..... 9
CIE 606, 705..... 6	CIE 606, 705..... 6
CIE 713, 729, 622 or 733 9	CIE 713, 729, 622 or 733 9
CIS 754 3	CIS 754 3
CIE 698 (Thesis) 3	CIE 728 3

Both the thesis program and the non-thesis program consist of thirty (30) required semester hours. Substitutions for required courses must be approved in advance and in writing by the department chair or the graduate coordinator.

Master of Education with Emphasis in Post-Secondary Reading

	Hours
REF 601, 607..... 6	6
Reading.....	18
Select six courses from the following for eighteen (18) hours: CIS 541, 542, 730, 737, 754, CIE 704, 706.	
Electives.....	6
Select two courses from the following for six (6) hours: CPY 612, ENG 703, REF 604, 605, 632, CSS 500.	

This program is designed to prepare teachers for the improvement of the reading-learning performance of older students and adults in community/junior colleges, colleges, and adult basic education programs by focusing on their special interests, needs, and motivations for seeking reading improvement. The completion of this program does not qualify the individual for Class AA certification in reading in Mississippi.

SPECIALIST'S PROGRAMS

The Department of Curriculum and Instruction offers the Specialist in Education degree with a major in Education. The student has the option of taking an emphasis in early childhood education, elementary education, secondary education, or reading.

The student pursuing a specialist's degree with emphasis in secondary education may choose a specialization from a number of teaching (subject) areas.

The student pursuing a specialist's degree with emphasis in reading may choose one of three specialization areas: curriculum and supervision in reading, clinical reading, and college reading/study skills.

Entrance into a particular specialist's degree program presupposes that the student has completed, or is willing to complete, the course work required for that program at the master's degree level.

All specialist's degree programs require a minimum of thirty-four (34) graduate semester hours beyond the master's degree.

The specialist's degree program requires admission to a particular program; submission of an approved program of studies; completion of all required course work, to include the completion of one full-time semester/term of residence taking all nine (9) semester hours on either the Hattiesburg Campus or the Gulf Park Campus, successful completion of the specialist's oral examination, and completion and defense of an approved thesis or field problem.

ADMISSION REQUIREMENTS

To be considered for **regular admission** to a specialist's program, an applicant must have (a) a grade point average of at least 3.25 (figured on scale where A equals 4.0) on previous graduate work; (b) a total score of at least 900 on the Aptitude Test (verbal plus quantitative) of the **Graduate Record Examinations**, or a total score of at least 1175 on the common and area examinations of the **National Teacher Examinations (NTE)**, or a total score of at least 1975 for the three tests (Communication Skills, General Knowledge, and Professional Knowledge) of the Core Battery of the NTE, or a score of at least 44 on the **Miller Analogies Test**; and (c) the approval of the chair of the department, the Dean of the College, and the Dean of the Graduate School.

An applicant who fails to meet the criteria for regular admission may be considered for **conditional admission** if he or she (a) meets one of the standardized test score requirements for regular admission and has a grade point average of at least 3.0 on previous graduate work or, when the standardized test score is below that required for regular admission, has a grade point average of 3.25 or higher on previous graduate work and shows promise of successfully completing degree requirements; and (b) has the approval of the department's Graduate Admissions Committee, the chair of the department, the Dean of the College, and the Dean of the Graduate School.

SPECIALIST'S DEGREE

Specialist in Education with Emphasis in Early Childhood Education

Plan I (Thesis Program)

	Hours		Hours
REF 602.....	3	PSY 670, 672, or	
EDA 620.....	3	REF 818.....	3
CIE 725.....	3	CIE 880.....	1
CIE 762.....	3	CIE 798 (Thesis).....	6

Plan II (Field Problem Program)

	Hours		Hours
REF 602.....	3	PSY 670, 672 or	
EDA 620.....	3	REF 818.....	3
CIE 725	3	CIE 880	1
CIE 762	3	Elective.....	3
		CIE 794 (Field Problem).....	3

In addition to the twenty-two (22) semester hour core requirement of Plan I and Plan II listed above, students pursuing the specialist's degree with an emphasis in early childhood education must complete at least twelve (12) hours in early childhood education.

The specialist's program with an emphasis in early childhood education consists of a minimum of thirty-four (34) semester hours beyond the master's degree. Substitutions for both required courses and designated electives must be approved in advance and in writing by the department chair or the graduate coordinator.

**Specialist in Education with Emphasis
in Elementary Education**

Plan I (Thesis Program)

	Hours		Hours
REF 602.....	3	PSY 670, 672, or	
EDA 620.....	3	REF 818.....	3
CIE 706 or 729	3	CIE 880	1
CIE 762	3	CIE 798 (Thesis)	6

Plan II (Field Problem Program)

	Hours		Hours
REF 602.....	3	PSY 670, 672, or	
EDA 620.....	3	REF 818.....	3
CIE 706 or 729	3	CIE 880	1
CIE 762	3	Elective.....	3
		CIE 794 (Field Problem).....	3

In addition to the twenty-two (22) semester hour core requirement of Plan I and Plan II listed above, students pursuing the specialist's degree with an emphasis in elementary education must complete at least twelve (12) additional semester hours in elementary education (preferably in a subject area or areas).

The specialist's program with an emphasis in elementary education consists of a minimum of thirty-four (34) semester hours beyond the master's degree. Substitutions for both required courses and designated electives must be approved in advance and in writing by the department chair or the graduate coordinator.

**Specialist in Education with Emphasis
in Secondary Education**

Plan I (Thesis Program)

	Hours		Hours
REF 602, 818	6	CIS 754 or 708	3
PSY 675 or EDA 620	3	CIS 880	1
		CIS 798 (Thesis).....	6

Plan II (Field Problem Program)

	Hours		Hours
REF 602, 818	6	CIS 754 or 708	3
PSY 670, 672, or 675	3	CIS 880	1
EDA 620	3	CIS 794 (Field Problem)	3

In addition to the nineteen (19) semester hour core requirements of Plan I and Plan II listed above, a specialization of at least fifteen (15) semester hours must be taken in one of the following areas:

Art	Physical Education
Biology	Physics
Chemistry	Science**
English	Social Studies***
Mathematics*	Speech Communication
Music Education	

The specialist's program in secondary education consists of a minimum of thirty-four (34) semester hours beyond the master's degree. Substitutions for both required courses and designated electives must be approved in advance and in writing by the department chair or graduate coordinator.

*The student selecting mathematics as a specialization area may not use any mathematics course designated as a mathematics refresher course.

**The student selecting science as a specialization area may use, with the approval of his or her adviser, a combination of biological and physical science courses; however, a minimum of nine (9) semester hours of graduate credit must be taken in each area of desired science endorsement for which the individual holds a Class AA endorsement. The student must meet the requirements for a Class AAA endorsement in at least one science area. No more than three (3) hours of science education (SCE) courses may be used. To be used in an endorsement area, the SCE course must be in that area.

***The student selecting social studies as a specialization area may take courses in any one or a combination of the following disciplines: history, geography, political science, sociology, and economics.

Specialist's in Education with Emphasis in Reading

Plan I (Thesis Program)

Hours	Hours
REF 602 or 818..... 3	EDA 620..... 3
PSY 670, 672, 674, or 675..... 3	CIE/CIS 880..... 1
	CIE/CIS 798..... 6

Plan II (Field Problem Program)

Hours	Hours
REF 602 or 818..... 3	EDA 620..... 3
PSY 670, 672, 674, or 675..... 3	CIE/CIS 880..... 1
CIE 762 3	CIE/CIS 794 (Field Problem) 3

In addition to the sixteen (16) semester hour core requirement of Plan I and Plan II listed above, the student must complete at least twelve (12) semester hours in advanced reading from one of the three specialization areas described below. Each of the areas is built around course and practicum experiences necessary to build basic competencies in the selected specialization area, while at the same time realizing and expanding on the previous experiences of the candidate.

Curriculum and Supervision in Reading. This specialization area includes a minimum of twelve (12) semester hours in advanced reading courses designed to build competencies necessary to pursue a career as a reading consultant, materials development specialist, or elementary, secondary reading supervisor.

Clinical Reading. This specialization area includes a minimum of twelve (12) semester hours in advanced reading courses designed to develop competencies necessary to pursue a career as a diagnostic evaluator or therapist in reading.

College Reading/Study Skills. This specialization area includes a minimum of twelve (12) semester hours in advanced reading courses designed to develop competencies in teaching reading/study skills to freshmen at the junior or senior college level.

The specialist's program in reading consists of a minimum of thirty-four (34) semester hours beyond the master's degree. Substitutions for required courses must be approved in advance and in writing by the department chair or the graduate coordinator.

DOCTORAL PROGRAMS

The Department of Curriculum and Instruction offers Doctor of Education and Doctor of Philosophy degrees with a major in education and an emphasis in elementary education, secondary education, and business education. If a student desires to receive a Doctor of Philosophy degree, he or she should follow one of the doctoral programs outlined in this section and, in addition, gain proficiency in a foreign language.

The doctoral program with an emphasis in elementary education provides for specialization in both early childhood education and in reading. A student choosing an emphasis in elementary education, with or without a specialization in either early childhood education or in reading, must complete the requisite course work in that area prior to beginning doctoral study.

The doctoral program with an emphasis in secondary education provides for specialization in various teaching (subject) areas as well as in reading. A student specializing in a particular area must complete the requisite course work in that area prior to beginning doctoral study.

The doctoral program with an emphasis in business education is offered through the Department of Curriculum and Instruction with program advisement provided by the Department of Business and Industrial Education. A student choosing this emphasis must complete the requisite course work in business education prior to beginning doctoral study.

All doctoral programs consist of minimum of seventy-five (75) graduate semester hours beyond the master's degree. A minimum of thirty-seven (37) of these hours must be taken on the Hattiesburg Campus. More than seventy-five (75) hours may be required in order to satisfy deficiencies which may exist in the student's background and preparation.

Students should consult the departmental guidelines and the **Admission Requirements and Procedures** section and the **General Academic Requirements** section of the **Graduate Bulletin**.

ADMISSION REQUIREMENTS

To be considered for **regular admission** to a doctoral program, an applicant must have (a) a grade point average of at least 3.5 (figured on a scale where A equals 4.0) on previous graduate work; (b) a total of at least 1000 on the Aptitude Test (verbal plus quantitative) of the **Graduate Record Examinations** (GRE); and (c) the approval of the department's Graduate Admissions Committee, the chair of department, the Dean of the College, and the Dean of Graduate School.

An applicant who fails to meet the criteria for regular admission may be considered for **conditional admission** if he or she (a) meets the GRE score requirement for regular admission and has a grade point average of at least 3.25 on previous graduate work or has a GRE score of at least 900 and a grade point average of at least 3.5 on previous graduate work; and (b) has the approval of the department's Graduate Admissions Committee, the chair of the department, the Dean of the College, and the Dean of the Graduate School.

DOCTORAL DEGREES

**Doctor of Education and Doctor of Philosophy with Emphasis
in Elementary Education**

	Hours
REF 761, 762, 816, 893	12
PSY 670 or REF 818	3
EDA 711 or 713	3
CIE____(an advanced methods course).....	3
CIE 862	3
CIE 880	3
CIE 898	12

In addition to the thirty-nine (39) semester hour core requirement listed above, students pursuing the doctoral degree with an emphasis in elementary education must complete at least twenty-four (24) hours beyond the master’s degree in elementary education and a minimum of nine (9) hours in a related field(s) outside of the Department of Curriculum and Instruction.

Students desiring specialization in early childhood education must complete at least twenty-four (24) beyond the master’s degree in early childhood and elementary education and a minimum of nine (9) hours in a related field(s) outside of the Department of Curriculum and Instruction.

Students desiring a specialization in reading must complete at least twenty-four (24) hours beyond the master’s degree in reading and a minimum of nine (9) hours in a related field(s) outside of the Department of Curriculum and Instruction.

Students seeking an emphasis in elementary education, with or without a specialization in either early childhood education or in reading, are to choose electives to complete a program consisting of a minimum of seventy-five (75) graduate semester hours beyond the master’s degree. More that seventy-five (75) hours may be required in order to satisfy deficiencies which may exist in the student’s background and preparation.

**Doctor of Education and Doctor of Philosophy with Emphasis
in Secondary Education**

	Hours
REF 761, 762, 816, 893	12
PSY 675 or REF 818	3
EDA 711 or 713	3
CIS____(an advanced methods course).....	3
CIS 880	3
CIS 898	12

The thirty-six (36) semester hours of required course work listed above serve as a core program for student’s pursuing a doctoral degree with an emphasis in secondary education. The doctoral program consists of a minimum of seventy-five (75) graduate semester hours beyond the master’s degree. More than seventy-five (75) hours may be required in order to satisfy deficiencies which may exist in the student’s background and preparation.

Of the total number of hours required of a doctoral student with an emphasis in secondary education, forty-two (42) semester hours of graduate credit (to include the master’s degree) must be taken in one of the following specialization or content areas:

- | | |
|-------------|----------------|
| Biology | Reading |
| Chemistry | Science |
| English | Social Studies |
| Mathematics | |

Doctor of Education and Doctor of Philosophy with Emphasis in Business Education

Students pursuing a doctoral degree with an emphasis in business education must complete the following course requirements: (a) the thirty-six (36) semester hours of required course work listed as a core program for students pursuing a doctoral degree with an emphasis in secondary education, (b) six (6) semester hours in a related area in business administration, and (c) twenty-four (24) semester hours in business education.

The doctoral program with an emphasis in business education consists of a minimum of seventy-five (75) graduate semester hours beyond the master's degree. More than seventy-five (75) hours may be required in order to satisfy deficiencies which may exist in the student's background and preparation. Of the total hours required of a doctoral student with emphasis in business education, forty-five (45) semester hours of graduate credit (to include the master's degree) must be taken in business education.

DEPARTMENT OF EDUCATIONAL LEADERSHIP AND RESEARCH

Edgar Bedenbaugh, Chair
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The programs in Educational Administration and Supervision encompass the full range of administrative positions and lead to the master's degree, the specialist's degree, and the doctorate in education with an emphasis in educational administration. Programs at the master's degree level provide entry level preparation in the elementary school principalship, the junior high school principalship, the high school principalship, and supervision of instruction. Programs at the specialist's and doctoral levels provide preparation for the superintendency, central administrative staff positions, and leadership roles in other institutional settings. In addition, the program at the doctoral level provides preparation for college teachers in educational administration and persons desiring to prepare for administration in higher education.

The Research and Foundations components of the Department of Educational Leadership and Research provide supportive services in teacher education. At the graduate level, these services are provided in the areas of Educational Foundations, Educational Media and Technology, and Educational Research. Also offered are the master's degree, specialist's degree, and doctoral minor emphasizing Educational Research.

The Adult Education component of the Department of Educational Leadership and Research offers programs of study which lead to four degrees in adult education: Master of Education (M.Ed.), Specialist in Education (Ed.S.), Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D). Through the completion of courses and/or degrees in those programs, students may enhance their understanding of adults as learners as well as the many means by which educational services are developed and delivered to adults.

Academic preparation in adult education is dependent not only upon knowledge of adult education theory and practice but also upon knowledge from related areas of study, such as psychology, sociology, administration, and management. Consequently, the courses and degree programs often follow an interdisciplinary approach in preparing persons for roles of professional service to adults. Adult education majors are encouraged to enroll in professionally relevant courses in cognate fields. Students from other departments frequently find adult education courses to be valuable as electives or academic minors.

The following course patterns for the different levels set forth only the minimum core requirements, and the electives selected to suit individual needs and objectives must be chosen with the advice and approval of the student's major professor. Therefore, it is

mandatory that the student consult early in his or her program, and frequently thereafter, with his or her major professor concerning the selection of courses and sequence in which these courses will be taken.

DEPARTMENT POLICIES

The following departmental policies are supplementary to the rules and regulations of the University and the Graduate School as set forth elsewhere in this **Bulletin**.

PROGRAMS AND COURSES IN
EDUCATIONAL ADMINISTRATION
MASTER'S PROGRAMS

Master of Education Degree in Educational Administration

Admission

To be considered for regular admission to the master's degree program, the applicant must: (a) have a minimum grade point average of 2.75 on the last two years of undergraduate education; (b) present a combined minimum score of 850 on the **Graduate Record Examinations**, or a minimum score of 1965 on the core battery of the **National Teacher Examinations**, or a minimum score of 39 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission but the grade point average is no lower than 2.5, or (b) the grade point average is higher than 2.75 and the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing degree requirements.

Application for Graduation Graduation is based upon:

- 1. Completion of an approved program of studies consisting of a minimum of thirty (30) semester hours. Adaptations in programs will be made to conform to administrative certification requirements.
- 2. Satisfactory completion of the comprehensive examination.

Educational Administration

	Hours
REF 601—Research: Its Introduction and Methodology	3
REF 607—Basic Course in Curriculum Development	3
Select three (3) hours from the following:	
REF 604, PSY 670, PSY 674, PSY 675.....	3
EDA 600—Basic Course in Educational Administration and Supervision	3
EDA 620—Supervision of Instruction*.....	3
EDA 650—School Business Management*.....	3
EDA 698—Thesis. Credit is deferred until thesis is completed**	6
Total 18 or 24 hours	

Advised selections: 6 or 12 hours. Subject to the approval of the student's adviser and consistent with certification requirements, courses are to be taken as follows:

- 1) Six (6) semester hours in Educational Administration and Supervision must be taken by students writing a thesis. Nine (9) semester hours are required for those students not writing a thesis. In either option, three (3) semester hours must be selected from the following courses depending on program emphasis:

EDA 630—Organization and Administration of the Elementary School 3

EDA 634—Organization and Administration of the Secondary School..... 3

- 2) The one remaining course for those not writing a thesis may be taken in a related area, with permission of the student's adviser..... 3

*Prerequisite: EDA 600

**Required only of students writing a thesis

Supervision of Instruction

	Hours
REF 601—Research: Its Introduction and Methodology	3
REF 607—Basic Course in Curriculum Development	3
CIE 728 or CIS 708.....	3
EDA 600—Basic Course in Educational Administration and Supervision.....	3
EDA 620—Supervision of Instruction*.....	3
EDA 720—Advanced Curriculum Development**.....	3
EDA 738—Practicum in Supervision**	3
EDA 698—Thesis. Credit deferred until thesis is completed***	6
Total 21 or 27 hours	

Electives: 3 or 9 hours. EDA 630 or EDA 634 is required as an elective. The remaining courses may be chosen from the related areas subject to the approval of the student's major professor.

*Prerequisite EDA 600

**Prerequisite EDA 620

***Required only of students writing a thesis

PROGRAMS AND COURSES IN EDUCATIONAL ADMINISTRATION SPECIALIST'S DEGREES

Specialist in Education with Emphasis in Educational Administration

Admission

To be considered for regular admission to the specialist's degree program, the applicant must: (a) have a minimum grade point average of 3.25 on previous graduate work; (b) present a combined minimum score of 900 on the **Graduate Record Examinations**, or a minimum score of 1975 on the core battery of the **National Teacher Examinations**, or a minimum score of 44 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission but the grade point average is no lower than 3.0; or (b) the grade point average is higher than 3.25 and the Program Admissions Committee, department chair, Dean of the College, and the Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

Application for Graduation

Graduation is based upon:

1. Completion of an approved program of studies as determined by the student's committee and which may consist of more than the minimum thirty-three (33) semester hours of credit required for graduation.
2. Satisfactory completion of the comprehensive examination.
3. Successful defense of the research project or the field problem.

PROGRAMS

The specialist's degree students must have completed all courses or their equivalent in the master's degree program. Those courses not taken must be completed but will not count as part of the specialist's program. Additional electives are required for previously completed required courses.

A minimum of nine (9) semester hours in cognate areas is required in all of the specialist's degree programs. The department defines cognate areas as those courses which broaden and complement the student's program. These courses and other electives will be chosen with the approval of the student's major professor and additional hours may be required to satisfy deficiencies in the student's program.

Administration

EDA 700, 704, 706, 710, 720, 736, 738

EDA 794 or EDA 798

Total—24 or 27 hours

Electives—6 or 9 hours in cognate areas

Secondary Administration

EDA 700, 704, 708, 710, 720, 738

EDA 794 or EDA 798

Total—21 or 24 hours

Electives—9 or 12 hours with 9 hours in cognate areas

Elementary Administration

EDA 700, 704, 710, 720, 738

EDA 794 or EDA 798

Total—18 or 21 hours

Electives—12 or 15 hours with 9 hours in cognate areas

School Business Management*

EDA 650, 698, 700, 704, 706, 708, 710

EDA 794 or EDA 798

Total—24 or 27 hours

Electives—6 or 9 hours from business oriented courses

Suggested courses are MGT 568, 572, 625; ACC 570; REF 712; FIN 640

*Prerequisites: EDA 600; REF 607; REF 601

Administration of Occupational Education*

EDA 650, 700, 706, 710, 712, 717, 719; IVE 611

(21 hours from these courses)

EDA 794 or EDA 798

Total—24 or 27 hours

Electives—6 or 9 hours from the following cognate areas: Industrial Psychology, Management Training and Development, Economic Development, Advanced Labor Economics, and Economic Geography

*Prerequisites are EDA 600, 620; REF 604

Curriculum and Supervision*

EDA 708, 720, 738; REF 632

CIE 728 or CIS 708

EDA 704 or EDA 601

EDA 794 or EDA 798

Total—21 or 24 hours

Electives—9 or 12 hours with 9 hours in cognate areas

*Prerequisites are EDA 600, 620; REF 607, PSY 670

Higher Education Administration*

EDA 704, 711, 712, 713, 715, 717, 719

CPY 640 or CPY 740

(18 hours from the above courses)

EDA 794 or EDA 798

Total 21 or 24 hours

Electives—6 or 9 hours in cognate areas

***Prerequisites are EDA 600 and REF 601**

DOCTORAL DEGREES

Doctor of Education and Doctor of Philosophy with Emphasis in Educational Administration

Admission

To be considered for regular admission to the doctoral degree program, the applicant must: (a) have a minimum grade-point average of 3.5 on previous graduate work; (b) present a combined minimum score of 1000 on the **Graduate Record Examinations**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score meets or exceeds the score required for regular admission but the grade point average is no lower than 3.25; or (b) the grade point average is higher than 3.5 and the Program Admissions Committee, department chair, Dean of the College and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

Qualifying Entrance Examination

1. Should be taken prior to the completion of eighteen (18) semester hours of study within the department, but may not be taken before having attained regular admission status.
2. May not be taken prior to the receipt of satisfactory GRE scores.
3. Regularly admitted doctoral students who fail the examination may repeat it upon the completion of nine (9) semester hours of credit after the semester in which the examination was taken.
4. The results of a master's degree comprehensive examination may not be substituted for this examination.

Planning Sheet

Planning sheets are completed after the qualifying examination has been passed and the committee appointed, but before the student has completed twenty-seven (27) semester hours.

Admission to Candidacy

Admission to candidacy should be submitted one semester prior to graduation and will be approved by the student's graduate committee upon:

1. Completion of an approved program of studies.
2. Satisfaction of the language and/or statistics requirement.
3. Completion of an approved dissertation prospectus.
4. Completion of the comprehensive examination.
5. Completion of the residency requirement.

Application for Graduation Graduation is based upon:

1. Meeting the departmental and Graduate School deadlines for receiving completed dissertation.
2. Successful defense of the completed dissertation.

PROGRAMS

At the doctoral level, programs are provided in: (1) General School Administration, and (2) Educational Administration with an emphasis in Higher Education. The general administration program provides preparation for the superintendent, other central office positions, and college teachers, while the program emphasizing higher education is designed to prepare administrators of higher education.

The doctoral program requires a minimum of eighty-four (84) semester hours beyond the bachelor's degree exclusive of the dissertation and proficiency in statistics. A minimum of thirty-two (32) semester hours must be taken on the Hattiesburg Campus excluding REF 761, REF 762, and EDA 898. The student's doctoral committee, appointed by the Graduate Dean, will approve the selection of required courses and electives and in order to secure breadth and depth in the student's preparation program may require more than the minimum number of hours of graduate credit in cognate areas, preferably in the social sciences. The department defines cognate areas as those courses which broaden and complement the student's program. Cognates as well as other courses will be chosen with the approval of the student's major professor. A strength of the doctoral program is its flexibility. A program of studies is formulated after the successful completion of the Qualifying Examination and is based upon the student's performance on this diagnostic procedure, previous educational background, and professional objectives.

Each doctoral student will be required to participate in a variety of laboratory and field experiences, many of which may not be connected with specific courses.

EDUCATIONAL MEDIA AND TECHNOLOGY

Specialist's Program in Educational Media and Technology

This program leading to the Specialist's degree in Education (Ed.S.) is intended to prepare individuals for careers as media specialists, curriculum consultants, and library media directors. The program meets requirements for AAA certification in Mississippi as well as for media specialist certification in many other states. As a sixth year program, the specialist's requirements presupposes a master's degree in audiovisual media, library science, instructional technology, curriculum and research, teaching or related area, and appropriate work experience.

The specialist's degree program requires regular admittance procedures to the Graduate School, appointment of a graduate adviser, filing of an approved program of studies, and completion of a comprehensive examination.

Specialist in Education with Emphasis in Media and Technology

Admission

To be considered for regular admission to the specialist's degree program, the applicant must: (a) have a minimum grade point average of 3.25 on previous graduate work; (b) present a combined minimum score of 900 on the **Graduate Record Examinations**, or a minimum score of 1175 (core battery 1975) on the **National Teacher Examinations**, or a minimum score of 44 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission but the grade point average is no lower than 3.0; or (b) the grade point average is higher than 3.25 and the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

Curriculum Requirements

A minimum of twelve (12) semester hours in advanced professional education is required of all students pursuing the Specialist's degree in Educational Media and Technology. Additional courses may be required to satisfy any deficiencies in the student's academic background and professional training.

Four courses, twelve (12) semester hours, should be selected from among the following:*

Hours

REF 601 or 602	3
CIE 728 or CIS 708	3
EDA 620 or 720 or 713	3
PSY 670 or 672	3

Due to the diverse background of students seeking a Specialist's degree in Educational Media and Technology, no set pattern of courses will be required in the media area. However, the courses shown below will serve as a basis for the selection of the curriculum.

Students who desire to write a thesis (REF 798) will complete five of the following courses for fifteen (15) semester hours. Those students who desire to complete a field problem (REF 794) will complete six of the following (18 semester hours):**

REF 516, 525, 526, 536, 590, 591, 609, 618, 620

622, 623, 625, 544, 545, 740 and 742

RTF 577

*Appropriate substitution of other graduate education courses may be made with permission of the student's adviser.

**Substitution of other graduate media courses as well as courses in computer technology, radio, television, and film may be made with approval of the student's adviser.

Doctoral Minor in Educational Media and Technology

Students majoring in a particular field or area at the doctoral level may also wish to pursue a doctoral minor in Educational Media and Technology. The program prepares individuals for positions as media specialists and library/media directors in the public schools, junior colleges, universities, and industry.

The doctoral minor in Educational Media and Technology requires a minimum of 15 semester hours. Five courses will be completed in the areas of television production, graphics, photography, and instructional development. Specific courses will be recommended which are commensurate with the student's background of training and experience. In the event certification is a consideration, particular courses will be required.

PROGRAMS IN EDUCATIONAL RESEARCH

Master's Program in Research and Evaluation

The Master of Science (M.S.) degree program in Research and Evaluation is designed to provide:

1. salable skills in the areas of measurement, research, computer analysis, and evaluation for those persons working in the behavioral sciences;
2. a basis for certifying evaluators of educational and social programs;
3. skills for obtaining funding;
4. skills for conducting and reporting both cooperative and independent research and/or evaluative endeavors;
5. for the establishment of a fundamental core of knowledge in the areas of measurement, research, and evaluation that would assist individuals in successfully completing more advanced training in these areas.

The master's program in Research and Evaluation does not require undergraduate coursework prerequisites. Students having an interest in measurement, quantification, evaluation, and accountability are welcome to apply for this program. Opportunities will

be made available to apply the skills learned in meeting current problems in the social and behavioral sciences.

Master of Science Degree in Research and Evaluation

Admission

To be considered for regular admission to the master's degree program, the applicant must: (a) have a minimum grade point average of 2.75 on the last two years of undergraduate education; (b) present a combined minimum score of 850 on the **Graduate Record Examinations**, or a minimum score of 1125 (core battery 1965) on the **National Teacher Examinations**, or a minimum score of 39 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission and the grade point average is no lower than 2.5, or (b) the grade point average is higher than 2.75 and the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing degree requirements.

Application for Graduation

Graduation is based upon:

- 1. Completion of required course work;
- 2. Satisfactory completion of written and/or comprehensive examination;
- 3. Satisfactory completion of Thesis or Research Problem.

Curriculum Requirements

The core requirements consist of the following 6 courses (eighteen (18) semester hours).

	Hours
REF 601, 602, 632, 761, 762, 770	18

In addition to completing the above courses, students must complete at least three (3) semester hours from the following:

REF 712, 792, 810, 824, 830.....	3
CSS 501, PSY 764, REF 645, CPY 614	3

All students must either write a thesis or complete a special problem in educational research. Students wishing to write a thesis (REF 698) will complete 6 semester hours of electives. Students completing a special problem in educational research (REF 792) will complete nine (9) semester hours of electives. Thirty semester hours are required to complete the master's program in Research and Evaluation.

Specialist's Program in Educational Research

The program leading to the specialist's degree in Education (Ed.S.) is designed to meet those goals listed under the master's degree program. The program is intended to serve as (1) a terminal program at the specialist's level for individuals not pursuing the doctoral degree and as (2) an advanced research program for individuals desiring specialization in research in addition to their major areas at the doctoral level.

Specialist in Education with Emphasis in Educational Research

Admission

To be considered for regular admission to the specialist's degree program, the applicant must: (a) have a minimum grade point average of 3.25 on previous graduate work; (b)

present a combined minimum score of 900 on the **Graduate Record Examinations**, or a minimum score of 1175 (core battery 1975) on the **National Teacher Examinations**, or a minimum score of 44 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission and the grade point average is no lower than 3.0; or (b) the grade point average is higher than 3.25 and the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

Application for Graduation

Graduation is based upon:

1. Completion of required course work;
2. Satisfactory completion of written and/or comprehensive examination;
3. Satisfactory completion of Thesis or Research Problem.

Curriculum Requirements

A student desiring to obtain a Specialist's degree in Research Training must possess a master's degree, and complete either twenty-seven (27) or thirty (30) semester hours of course work. Twenty-seven (27) hours are required for the student who writes a thesis (REF 798) and thirty (30) hours for the student who conducts a field problem (REF 794). The student must have also completed, or be willing to complete, the following prerequisites or their equivalents: *REF 601 and *602.

The following five courses (fifteen (15) semester hours) are required of each student:

	Hours
REF 761, 762, 824, 830, 893.....	15

A student who chooses to write a thesis will complete one course (three (3) semester hours) from among the following. A student who conducts a field problem will complete two courses (six (6) semester hours).

REF 770, 792.....	3 or 6
PSY 764.....	3 or 6
CSS 501, REF 645, CPY 614	3 or 6

Each student must complete either REF 794 (Field Problems-3 semester hours) or REF 798 (Specialist Thesis-6 semester hours).

Students will take nine (9) semester hours of electives to complete the program.

*May be counted as electives in the specialist's degree program.

Doctoral Minor in Educational Research

Students majoring in a particular field or area at the doctoral level may also wish to pursue a doctoral minor in Educational Research. The objectives of the doctoral minor are to prepare persons to:

1. initiate or direct applied or institutional research in college, private or public agencies, and school systems;
2. teach applied statistics and research methodology in institutions of higher learning;
3. advise graduate and undergraduate students relative to the research process involved in thesis, dissertations, and projects;
4. utilize available computer packages for statistical and informational processing;
5. serve as consultant to agencies involved in research or evaluation.

A minimum of twelve (12) semester hours is necessary in addition to REF 761 and REF 762 which are required for basic proficiency of all doctoral students in education.

The following 6 graduate courses (eighteen (18) semester hours) represent the requirements for the doctoral minor:

	Hours
REF 761, 762, 824, 830, 893.....	15
CSS 501, REF 645.....	3

Substitutions from the following list of courses may be made with departmental approval:

PSY 764
REF 770, 791, 792, 794

PROGRAMS IN ADULT EDUCATION

Adult Education programs, by nature interdisciplinary and flexible, offer personnel from diverse agencies opportunities for upgrading and building on professional experience. Such agencies include vocational-technical centers, the armed forces, health services, criminal justice and law enforcement programs, public school systems, junior and senior colleges, human service agencies, the Cooperative Extension Service, business and industrial organizations, and others. AA and AAA certification requirements as set by the Mississippi Department of Education may be met through these programs.

Admission to degree programs will be conducted in accordance with College and University policies (please refer to the "Admissions Requirements and Procedures" section of the **USM Bulletin: Graduate Programs**). In general, these procedures include the submission of application and credentials to the Director of Graduate Admissions. Additionally, all degree applicants should send the program coordinator (a) a letter explaining the applicant's interest in and reasons for pursuing the degree and (b) a resume of academic and job-related experiences. The Admissions Review Committee will review all applications and recommend the appropriate actions.

Admitted students will be assigned a temporary adviser until the student, with the concurrence of the program coordinator, selects a permanent adult education adviser. Doctoral students will also select a doctoral advisory committee composed of four additional faculty members, at least one of whom must be a member of the Adult Education faculty. Then, in accordance with departmental policy, students, in collaboration with their appointed advisers, will design programs of study which reflect their long term goals and interests. Basic admissions eligibility and graduation criteria are discussed in the sections which follow.

Master of Education in Adult Education

Admission

To be considered for regular admission to the master's degree program, the applicant must: (a) have a minimum grade point average of 2.75 on the last two years of undergraduate education; (b) present a combined minimum score of 850 on the **Graduate Record Examinations**, or a minimum score of 1125 (core battery 1965) on the **National Teacher Examinations**, or a minimum score of 39 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission but the grade point average is no lower than 2.5, or (b) the grade point average is higher than 2.75 and the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing degree requirements.

Curriculum Requirements

The Master of Education degree requires thirty (30) semester hours of graduate course work (no thesis is required for this degree). In addition to the eighteen (18) hours of courses specified below, twelve (12) hours of electives must also be taken. If the student wants to receive AA certification in the State of Mississippi, the electives must include REF 607, and the student must meet all state requirements for certification.

Required Courses

	Hours
ADE 540, 576, 601, and 607 (ADE core).....	12
REF 601 (Introduction to Research)	3
REF 604 or 816 or 818 (Educational Foundations)	3

Electives

One additional ADE course.....	3
Courses in degree-related areas	9

30

To graduate, students must complete an approved thirty (30) semester hour program of studies with an acceptable grade point average and successfully complete a written comprehensive examination.

SPECIALIST'S DEGREE IN ADULT EDUCATION

Specialist in Education with Emphasis in Adult Education

Admission

To be considered for regular admission to the specialist's degree program, the applicant must: (a) have a minimum grade point average of 3.25 on previous graduate work; (b) present a combined minimum score of 900 on the **Graduate Record Examinations**, or a minimum score of 1175 (core battery 1975) on the **National Teacher Examinations**, or a minimum score of 44 on the **Miller Analogies Test**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score, the **National Teacher Examinations** score, or the **Miller Analogies Test** score meets or exceeds the score required for regular admission but the grade point average is no lower than 3.0; or (b) the grade point average is higher than 3.25 and the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

Curriculum Requirements

The Specialist in Education degree requires thirty-three (33) semester hours of graduate work beyond the master's degree. Adult Education EdS students must complete all ADE and REF courses (or their equivalents) specified for the Master of Education in Adult Education. Students are also required to complete either a thesis (ADE 798) or an appropriate field study (ADE 794). Altogether, students should complete twenty-one (21) semester hours of adult education courses and twelve (12) hours from relevant content areas or behavioral sciences related to the goals of the student. All courses must be approved by the student's adviser.

To graduate, students must complete an approved thirty-three (33) semester hour program of studies with an acceptable grade point average, successfully complete a written comprehensive examination, and successfully complete and defend an acceptable thesis or field study.

DOCTOR OF EDUCATION AND DOCTOR OF PHILOSOPHY

**Doctor of Education and Doctor of Philosophy
with Emphasis in Adult Education**

Admission

To be considered for regular admission to the doctoral degree program, the applicant must: (a) have a minimum grade-point average of 3.5 on previous graduate work; (b) present a combined minimum score of 1000 on the **Graduate Record Examinations**; and (c) have the approval of the Program Admissions Committee, department chair, Dean of the College, and Dean of the Graduate School.

Students who fail to meet the criteria for regular admission may be considered for conditional admission if: (a) the **Graduate Record Examinations** score meets or exceeds the score required for regular admission but the grade point average is no lower than 3.25; or (b) the grade point average is higher than 3.5 and the Program Admissions Committee, department chair, Dean of the College and Dean of the Graduate School are satisfied that the applicant shows promise of successfully completing graduate degree requirements.

Curriculum Requirements

Doctoral programs of study should be designed to provide competency in five areas: (1) the general field of adult education in the contemporary world; (2) psychology of adult learning; (3) social setting of adult learning; (4) foundations of education; and (5) specific abilities required for the student's particular area of professional interests, including both major areas of study and cognate fields. As early in the program as possible, doctoral students should select an area of emphasis for dissertation research. Programs of study (including all course decisions, research topics, and foreign language selections) must be approved by each student's advisory committee.

Doctoral students may pursue either the Ed.D. or the Ph.D. Both degrees require a minimum of 66 semester hours of course work (including dissertation) beyond the master's degree. Any hours taken to establish proficiencies in statistics, foreign languages, or areas of needed remediation are in excess of the 66 hour program minimum. Students pursuing the Ph.D. must establish proficiency in one foreign language approved by the Graduate School either through additional course work or through examination. All doctoral students must also complete a residency requirement, defined as two consecutive terms (which may include summer term) of minimum 12-hour course loads each. Students should not be employed full-time during residency. Physical residence on campus or in Hattiesburg is recommended but not required during residency.

Departmental Program of Studies (minimum 66 credit hours)

Doctoral students in adult education will complete a number of required courses and electives, but the program is designed to allow intensive pursuit of other areas in which adult educators may have interest or professional goals. Accordingly, there are several possible tracks students may pursue in addition to the requirements common for all students. The minimum required program includes (exclusive of statistical proficiency):

	Hours
ADE 540, 576, 601, 607, and 889 (ADE Core).....	15
ADE Electives (9 hours of which must be classroom courses).....	12
ADE 898 (dissertation)	12
REF 601 and REF 602	6
REF 604, 816, or 818	3
Other Electives	<u>18</u>

Within this program, students may pursue related areas in which to specialize, or tracks. Students are not required to be in a track; they are not prescriptive. They are, however, suggestive of possible plans for individual doctoral programs.

Administrative and Managerial: For those interested in public sector and private sector administration. In addition to ADE 602, recommended course areas would include Business, Management, Marketing, and Educational Administration.

Adult Basic Education: For those interested in teaching and administering adult basic and secondary education. Recommended courses include ADE 541, 542, 545, 602, and related courses in Reading and English composition.

Research: For those interested in conducting research at a professional level. Recommended course areas would include statistics, research design, grant writing, historical research methods, psychology, and computers.

Career Specialization: For those interested in using their elective courses to pursue specific career interests, such as nursing, criminal justice, fine arts, liberal arts, business, technical fields, library services, etc. Many people in this track might be teachers or trainers in post-secondary institutions, health-related organizations, or business organizations.

Gerontology: For those interested in the older adult. In addition to ADE 580 and 750, germane courses in psychology, sociology, social work, and/or counseling are recommended.

Dissertation (12 hours)

During the dissertation process, all students must complete twelve (12) hours of ADE 898, Dissertation. A minimum of three (3) credit hours of ADE 898 must be completed during the semester in which the dissertation is defended. The student submits three documents to a doctoral committee of five faculty: a pre-proposal, a proposal, and a completed dissertation. The last two are defended orally. A student applies for candidacy only after all degree requirements are completed except the oral defense of the dissertation.

Examinations

Qualifying examinations are scheduled for the third Friday after registration in each term. Doctoral students must take this written examination in the first term of their course work. After the qualifying exam is successfully completed, but still during the first term, the student will schedule a program planning meeting with the Adult Education faculty.

Comprehensive written examinations are prepared by doctoral committee members and are taken at or near the conclusion of course work. They are based on material from the overall program, including the books on the doctoral reading list. The committee may require an additional oral examination at its discretion. Comprehensive examinations are taken by arrangement on an individual basis.

Graduation

To complete either the Ed.D. or Ph.D. degree in Adult Education, students must maintain an acceptable grade point average, complete all course work, complete necessary proficiencies, pass qualifying and comprehensive examinations, and successfully complete and defend a dissertation.

DEPARTMENT OF PSYCHOLOGY

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The Department of Psychology offers the Ph.D. in four emphasis areas: clinical, general-experimental, school, and industrial/organizational psychology. The doctoral programs in clinical psychology and school psychology are fully accredited by the American Psychological Association (APA). Additionally, graduate training in school psychology is fully accredited by NCATE.

The department’s applied doctoral emphasis areas (clinical, school, and industrial/organizational psychology) are based on the scientist-practitioner training model in which the scientific and professional components are complementary and fully integrated at all stages of training. Doctoral training in the department’s basic emphasis area (general-experimental psychology) follows a tutorial model in which each student is expected to work closely with a faculty member in an area of basic or applied research. All of USM’s doctoral emphasis areas are designed to help ensure that students receive strong preparation in the research and theoretical literature of psychology as an experimental behavioral science. **Further, as part of a publicly supported institution of higher education, departmental resources for training, research, and service functions are appropriately directed toward the identification and solution of behavioral problems within the public sector.**

Students are admitted to the program based on an assessment of the likelihood that they will be able to attain the doctorate and make a contribution to the discipline. A master’s degree in psychology is required of all students prior to embarking on the doctorate. Students who have not completed such a master’s degree must do so at USM en route toward their doctorate. Applicants are judged on the basis of prior academic record, GRE scores, letters of recommendation, and evidence of creative scholarship. For regular admission, a student must (1) have a B average or better on the most recent 60 semester hours of academic work, (2) have a minimum score (quantitative + verbal) of 1,000 on the Aptitude Section of the **Graduate Record Examination (GRE)**, and (3) have completed appropriate undergraduate foundation courses in psychology (e.g., statistics, experimental, and history and systems). A student may be invited to come to campus for a personal interview as part of the application process. Because the department receives applications from a larger number of qualified applicants than it can enroll, the credentials of entering students typically exceed these minimum standards. Prospective students should specify their intended emphasis area at time of application. Brochures describing each of these are available from the department. New students are normally admitted only in September. Applications received by March 1 will receive a full review. Applications received after that date will be considered if openings are still available. All students interested in applying for admission to the program are encouraged to contact the department prior to submitting their applications.

MASTER’S PROGRAMS

Master of Arts and Master of Science degree programs in the Department of Psychology are designed to prepare students for advanced graduate work, to teach in a junior/community or senior college, or to work in certain research or applied settings.

Common Requirements for the Master of Arts and Master of Science Degrees

Hours

Departmental Courses:	
PSY 610 (2 hours), 621, 624, 635, 660, 661, 662, 663, 679	26
Electives (All elective courses must be approved by the student’s major professor)	6
Master’s comprehensive examination. Examination requirements are described in the General Academic Requirements section of the Bulletin .	

Additional Requirements for the Master of Arts Degree

Hours

Departmental Courses:	
Master’s Thesis: PSY 698	6
Foreign Language Requirement: Proficiency in one Foreign Language is required for the M.A. degree. Specific proficiency requirements are described in the General Academic Requirements section of the Bulletin .	

Note: Students completing the M.S. degree in preparation for doctoral study must complete a master's thesis in addition to the requirements listed under Common Requirements for M.A. and M.S. degrees. Completion of the M.A. or M.S. degree with thesis does not guarantee admission to the doctoral degree program.

School Psychology Certification Program

The School Psychology entry-level training program is designed to prepare students who plan to make application for certification as School Psychologists (AAA) in Mississippi as well as in most other states. In addition to the requirements listed under Common Requirements for M.A. and M.S. Degrees, the student must take the following:

Hours

Departmental Courses:

PSY 642 (9 hours), 670, 671 (6 hours), 693 (2 hours), 740, 771 (6 hours), 772 (6 hours), 777, 793 (2 hours)	40
Research Requirement: PSY 698 or 691	6

Note: Six of the required 40 semester hours of course work may be taken as master's degree electives. Students with non-thesis master's degrees must complete a supervised research project. Those seeking certification as School Psychologists must complete a one-year internship (PSY 795: 8 to 12 semester hours credit). Each student, in consultation with the major professor, should identify any additional requirements necessary for certification in the state in which the student plans to work.

THE DOCTOR OF PHILOSOPHY DEGREE

Students working on a Doctor of Philosophy degree in Psychology may work in any one of the following emphasis areas: (1) general experimental psychology; (2) clinical psychology; (3) industrial/organizational psychology; or (4) school psychology. Students admitted for work in any of the areas of emphasis must have completed a master's degree with course work equivalent to that listed under Common Requirements for M.A. and M.S. Degrees. Students with a prior non-thesis master's degree from another institution will be required to complete a thesis-equivalent research project.

Common Requirements for the Doctoral Degree

Hours

Departmental Courses:

PSY 898 (12 hours)	12
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Foreign Language Requirement: One Foreign Language and proficiency in Statistics are required for the doctoral degree. Specific proficiency requirements are described in the General Academic Requirements section of the **Bulletin**.

Doctoral qualifying and comprehensive examinations. Examination requirements are described in the General Academic Requirements section of the **Bulletin**.

Requirements for an Emphasis in General Experimental Psychology

In addition to the requirements listed under Common Requirements for the Doctor of Philosophy degree, the student must take the following:

Hours

Departmental Courses:

PSY 711 (1 hour), 712, 721, 722, or 725; 728 (9 hours), 750, 761, 764	25
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Electives:

All electives must be approved by the student's major adviser and emphasis area director	21
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Requirements for an Emphasis in Clinical Psychology

In addition to the requirements listed under Common Requirements for the Doctor of Philosophy degree, the student must take the following:

	Hours
Departmental Courses:	
PSY 616, 640, 641; 721, 722, or 725; 734, 735 (9 hours), 736, 737, 740, 741, 750, 780, 782 (minimum of 9 hours), 784, 794 (9 hours), 796 (12 hours)	73
Electives:	
All electives must be approved by the student's major adviser and emphasis area director	12

Requirements for an Emphasis in Industrial/Organizational Psychology

In addition to the requirements listed under Common Requirements for the Doctor of Philosophy degree, the student must take the following:

	Hours
Departmental Courses:	
PSY 551, 562, 615 (4 hours), 691 (4 hours); 721, 722, or 725; 750, 751, 752, 753, 754, 755 (9 hours), 761, 764	47
Minor:	
Students in the I/O emphasis area must complete a 12-hour minor in Management with courses selected from MGT 572, 620, 625, 630, 640, 669	12
Electives:	
All electives must be approved by the student's major adviser and emphasis area director.	6

Requirements for an Emphasis in School Psychology

In addition to the requirements listed under Common Requirements for the Doctor of Philosophy degree, the student must take the following:

	Hours
Departmental Courses:	
PSY 642 (9 hours), 670, 671 (6 hours), 693 (2 hours); 721, 722, or 725; 740, 750, 771 (12 hours), 772 (12 hours), 777, 793 (2 hours), 795 (8 hours)	66
Note: Students completing the doctoral degree program with an emphasis in School Psychology will be eligible to apply for Mississippi AAAA School Psychologist certification. Each student, in consultation with the major professor, should identify any additional requirements necessary for certification in the state in which the student plans to work.	

DEPARTMENT OF SPECIAL EDUCATION

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The Department of Special Education offers graduate programs leading to the master's (M.Ed.), specialist's (Ed.S.), and the doctoral (Ed.D., Ph.D.) degrees. Non-majors and experienced teachers may take work leading toward certification, enrichment, or competency in areas of interest.

MASTER'S PROGRAM

The master's degree program offers several options to the student. This program is open to non-special education majors. The candidate may specialize in a specific area or may elect to combine general special education areas. In general, each program will

include six (6) semester hours in Educational Research and Foundations (REF 601, 607), cognate hours, area course requirements, and elective hours to total a minimum of thirty (30) semester hours.

	Hours
Mental Retardation—SPE 640, 641, 643, 645, 671, 709	18
Specific Learning Disabilities—SPE 630, 631, 632, 634, 671, 709	18
Emotionally Disturbed—SPE 650, 651, 652, 654, 671, 709	18
Gifted—SPE 560, 661, 662, 664, 671, 709	18

SPECIALIST'S PROGRAM

The specialist's degree is granted upon completion of a specifically planned program of study leading to competency in an area of Special Education. The purpose of this program is to train highly qualified personnel in the education of exceptional children and adults. The program consists of a minimum of thirty-three (33) semester hours in a planned sequence to include the major area, cognates, research, and practicum. A field study (SPE 794) or thesis (SPE 798) is required.

DOCTORAL PROGRAM

The doctoral program is comprehensive and places emphasis on teacher education, administration, research, and community services. (An internship is required in at least one of the above.) The candidate is expected to develop competency in each of the above areas; and the program will be based upon these as well as experience, background, and information gathered from written and oral qualifying examinations.

Required courses include:

Teacher Education	SPE 801, 803, 880
Administration	SPE 770, 772
Research	SPE 701, 791
Community Service	SPE 792, 802

In addition, each candidate will be expected to include a minimum of six (6) semester hours with a department outside of Special Education. Twelve (12) hours of academic credit are given for the dissertation (SPE 898).

Admission

All graduate degree candidates must conform to the entrance and academic requirements listed in this **Bulletin** as indicated by the School. In addition to the general requirements for admission to the Graduate School, to be admitted on a regular basis to the department, the candidate must earn a minimum score on the combined aptitude section of the GRE of 900 (quantitative plus verbal) for the master's and specialist's, and 1000 (quantitative plus verbal) for the doctoral degree. NTE common and area test scores totaling 1125 may be substituted for the GRE at the master's level; 1175 at the specialist's level. The new NTE Core Battery scores totaling 1965 may be used at the master's; 1975 at the specialist's. **Miller Analogies Test** scores of 39 may be used at the master's level; 44 at the specialist's level. A GPA of 3.0 is required. A minimum of two years of professionally appropriate experience is also required for admission to the specialist's and doctoral programs. Conditional admission may be considered for applicants whose grades or GREs are marginal, but other evidence indicates a high probability of success in graduate school. In such cases, grades in selected courses, previous experience, letters of recommendation, and personal interviews may be more heavily weighted.

COLLEGE OF HEALTH AND HUMAN SCIENCES

**Graduate Degrees
1990-1991**

School	Major	Degree
Master's Level		
School of Home Economics	Family Life Studies	Master of Science
		Child Development Emphasis
		Family Relations Emphasis
		Interdisciplinary Gerontology Emphasis
		Marriage and Family Therapy Emphasis
	Home Economics	Master of Science
		Family Economics and Management Emphasis
		Food and Nutrition Emphasis
		Home Economics Education Emphasis
	Institution Management	Master of Science
School of Human Performance and Recreation	Physical Education	Master of Science
		Administration Emphasis
		Coaching and Sports Administration Emphasis
		Exercise Science Emphasis
		Teaching Emphasis
	Recreation	Master of Science
		Community and Municipal Recreation Emphasis
		Recreation Planning and Resources Management Emphasis
		Therapeutic Recreation Emphasis
School of Nursing	Community Health Nursing	Master of Science
	Nursing Service Administration	Master of Science
	Psychiatric Nursing	Master of Science
School of Social Work	Social Work	Master of Social Work
Center for Community Health	Public Health	Master of Public Health
		Health Education Emphasis
		Health Policy and Administration Emphasis
	Health Education	Master of Science
		Community Health Education Emphasis
		Occupational Safety and Health Emphasis
		Safety and Driver Education Emphasis

Specialist Level

School of Home Economics

Home Economics

Specialist in Education

Home Economics Education

Emphasis

Doctor's Level

School of Human Performance and Recreation

Health, Physical Education,
and Recreation

Doctor of Education

Doctor of Philosophy

Administration and Teaching Emphasis

Exercise Physiology Emphasis

COLLEGE OF HEALTH AND HUMAN SCIENCES

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The College of Health and Human Sciences currently offers graduate degree programs at the Master of Public Health, Master of Science, Master of Social Work, Specialist in Education, Doctor of Education and Doctor of Philosophy levels. Succinct descriptions of the degree programs within the School of Home Economics, the School of Human Performance and Recreation, the School of Nursing, the School of Social Work, and the Center for Community Health can be examined in the respective school sections. The graduate programs are oriented toward meeting career objectives in the professional and educational markets and promoting advanced study in areas of interest to the students.

REQUIREMENTS FOR ADMISSION

Admission to the Graduate School for study in the College of Health and Human Sciences requires a minimum grade point average of 2.75 at the undergraduate level and a GRE score of at least 850 for master's level and 1000 for doctoral study, plus additional criteria in certain schools (see general admission requirements of the individual schools). Exceptions to these requirements must be approved by the major adviser, director of the school, the Dean of the College, and the Graduate School Dean. Regardless of the degree level pursued, the student is responsible for following all graduate regulations.

REQUIREMENTS FOR GRADUATION

In the College of Health and Human Sciences, the minimum requirements for the Master's, Specialist, and Doctoral degrees are determined by the individual graduate programs within the five units. Programs offer both the thesis and non-thesis options, with the doctoral programs mandating a dissertation. The Specialist's degree requires a minimum of thirty-three (33) semester hours past the master's degree, a research problem and one semester of full-time residency. Comprehensive exams (both oral and written) may be required in lieu of, or in addition to, completion of the thesis or dissertation. Consult the specific degree programs for their requirements.

SCHOOL OF HUMAN PERFORMANCE AND RECREATION

Walter H. Bumgardner, Director
Hattiesburg, MS 39406-5142
(601) 266-5386

The School of Human Performance and Recreation offers the Master of Science, the Doctor of Education, and the Doctor of Philosophy degrees. Program development is oriented toward supply and demand in the professional job market; flexibility of program requirements allows for academic fulfillment of individual career interests.

Admission to programs leading to the Master of Science degree requires an acceptable score on the **Graduate Record Examinations**, (850* combined verbal and quantitative scores) a GPA of 2.75 or higher at the baccalaureate level, and a minimum of an undergraduate minor (or its equivalent) in an appropriate** field of study.

The Doctor of Education and Doctor of Philosophy degrees require a minimum of fifty-eight (58) semester hours beyond the master's degree or eighty-eight (88) semester

hours beyond the baccalaureate degree, excluding the dissertation. Consideration for admission will be based upon the following criteria:

- A. Acceptable score on the **Graduate Record Examinations** (1000* combined verbal and quantitative scores)
- B. Previous academic achievement (GPA of 3.5 or above on all previous graduate work)
- C. Professional achievements
- D. A personal interview before a representative committee of the School of Human Performance and Recreation graduate faculty.

Written and oral examinations are required of all graduate students in the master's and doctoral programs. Requests to take the comprehensive examination must be made in writing the semester prior to administration of the examination. The request should be sent to the Director, School of Human Performance and Recreation and the following typed information is to be included:

- A. Your name as it appears on official school records
- B. Your Social Security number
- C. Your major and emphasis area
- D. Your address and telephone number (during semester in which examination will be taken)

All general Graduate School requirements outlined earlier in this **Bulletin** must be satisfied for students to progress successfully toward degrees. Regardless of degree level pursued, the student is responsible for following all graduate regulations. The student's major professor will assist, but the student is expected to know what is required and to take full responsibility.

*Individuals scoring below the stated GRE score may be considered for conditional admittance based on other criteria.

**Specific competencies for admission are determined by each area.

PHYSICAL EDUCATION

Course requirements for the Master of Science degree in Physical Education include thirty-eight (38) semester hours of graduate work plus any undergraduate courses deemed necessary to correct deficiencies in the student's background.

This degree program is planned to prepare students for advanced graduate work or careers in the following emphasis areas: (1) exercise science; (2) teaching or coaching; or (3) administration. Students seeking AA teacher certification must hold, or be qualified to hold, A certification. In addition, they must complete REF 601, 602, and 607 in lieu of PED 680 and 742.

This program of studies is designed to place emphasis on the preparation of professionals for leadership roles as teachers, coaches, or administrators. Special consideration is given to the study of interpersonal relationships involved in the administration of instructional, competitive, and recreational sports programs.

Requirements for an Emphasis in Administration

	Hours
EDA 710 - School Law	3
PED 680 - Research Techniques.....	3
PED 720 - Problems in Administration in Physical Education	3
PED 722 - Organization and Administration of Intramural and Extramural Activities..	3
PED 742 - Problems of Curriculum in Physical Education	3
PED 744 - Foundations and Trends in Health and Physical Education	3
PED 750 - Facilities and Equipment in Physical Education	3
REF 602 - Introduction to Educational Statistics	3
Electives (Thesis, Non-Thesis).....	9
	Minimum: 33

Requirements for an Emphasis in Coaching and Sports Administration

	Hours
CSA 505 - Governing Agencies for Competitive Athletics	3
CSA 509 - Psychological and Sociological Aspects of Coaching.....	3
CSA 570 - Assessment and Development of Athletic Attributes	3
CSA 670 - Administration of Athletics.....	3
CSA 676 - Athletic Seminar.....	3
CSA 678 - Care and Treatment of Athletic Injuries.....	3
CSA 680 - Research Techniques	3
PED 680 - Research Techniques.....	3
PED 705 - Motor Learning	3
PED 709 - Age Characteristics of Motor Skills.....	3
Electives (Thesis, Non-Thesis).....	<u>6</u>
Minimum:	33

Requirements for an Emphasis in Exercise Science

	Hours
PED 601 - Physiological Basis of Activity	3
PED 602 - Theory and Practice of Graded Exercise Testing	3
PED 603 - Theory and Practice of Exercise Leadership.....	3
PED 680 - Research Techniques.....	3
PED 703 - Advanced Kinesiology.....	3
PED 706 - Cardiovascular Physiology.....	3
PED 707 - Physiological Response of Women to Physical Training.....	3
PED 730 - Fundamentals of Cardiac Rehabilitation.....	3
PED 780 - Graduate Seminar	1
PED 834 - Biomechanical Analysis of Sports Skills	3
Adviser Approved Elective	3
REF 761 - Experimental Design.....	3
Minor Field of Study	<u>9</u>
Thesis Option:	
PED 698 - Thesis.....	<u>6</u>
Non-Thesis Option:	
PED 796 - Practicum in Physical Education.....	<u>6</u>
Minimum:	40

Requirements for an Emphasis in Teaching

	Hours
PED 704 - Tests and Measurements in Physical Education.....	3
PED 705 - Motor Learning	3
PED 709 - Age Characteristics of Motor Skills.....	3
PED 720 - Problems of Administration in Physical Education.....	3
PED 723 - Principles of Teaching Physical Education	3
PED 744 - Foundations and Trends in Health and Physical Education.....	3
PED 745 - Effective Teaching and Supervision of Physical Education.....	3
REF 601 - Research: Its Introduction and Methodolgy	3
REF 602 - Introduction to Educational Statistics	3
REF 607 - Basic Course in Curriculum Development.....	3
Electives (Thesis, Non-Thesis).....	<u>3</u>
Minimum:	33

RECREATION

A Master of Science degree is offered in Recreation. Through the selection of elective courses, further specialization may be achieved in the following areas of study:

- (1) Community and Municipal Recreation Emphasis
- (2) Recreation Planning and Resource Management Emphasis
- (3) Therapeutic Recreation Emphasis

In addition, students may choose courses in the area of military recreation.

Program core requirements are:	Hours
REC 680 - Research Techniques	3
REC 694 - Field Problems.....	1
REC 701 - Problems and Emerging Trends in Recreation	3
REC 702 - Research and Evaluation in Recreation and Leisure	3
REC 703 - Philosophical Foundations of Recreation.....	3
REC 704 - Special Field Studies in Recreation	3

A minimum of eighteen (18) hours in courses must be at or above the 600 level.

In addition to the requirements listed under Core Requirements for a Master of Science degree in Recreation, the student must complete the following for one emphasis area:

Requirements for an Emphasis in Community and Municipal Recreation

	Hours
REC 513 - Organization and Administration of Recreation.....	3
REC 515 - Business Procedures for Parks and Recreation.....	3
REC 517 - Legal Aspects of Recreation and Leisure Services	3
REC 534 - Park Design and Maintenance	3
REC 536 - Park and Recreation Planning.....	3

Requirements for an Emphasis in Recreation Planning and Resource Management

	Hours
REC 534 - Park Design and Maintenance	3
REC 536 - Park and Recreation Planning.....	3
REC 541 - Resource Management and Policy	3
REC 547 - Interpretation of Cultural and Natural Resources	3

Requirements for an Emphasis in Therapeutic Recreation

	Hours
REC 550 - Leisure Education	3
REC 551 - Therapeutic Recreation Program Planning.....	3
REC 552 - Gerontology and Therapeutic Recreation for Later Years.....	3
REC 653 - Administrative Aspects in Therapeutic Recreation	3

The program provides three options for completion of degree requirements.

- (1) Thesis Option: Entails completion of a thesis and a minimum of thirty-four (34) semester hours of courses. The thirty-four (34) hours includes six (6) thesis hours.
- (2) Internship Option: Entails completion of an internship, plus one (1) professional paper and a minimum of thirty-four (34) semester hours of courses. The thirty-four (34) hours includes six (6) internship hours.
- (3) Coursework Option: Entails completion of a minimum of thirty-seven (37) semester hours of courses.

Students who have earned a baccalaureate degree in a field other than recreation and parks may be required to complete up to twelve (12) to fifteen (15) semester hours of additional course work in pursuit of the master's degree.

DOCTORAL PROGRAM

The Doctor of Education and Doctor of Philosophy degrees are in Health, Physical Education, and Recreation with similar emphasis options as outlined in the master's program in Physical Education.

In addition to the general admissions and academic regulations and requirements of the University, doctoral requirements are:

- 1. Upon the acceptance of the dissertation by the candidate's committee and at least four weeks prior to graduation, a final oral examination in defense of the candidate's dissertation will be administered by the school and the committee.
- 2. Programs of study, including all course decisions, research topics, and additional requirements specified by the University for proficiency in statistics, computer science and/or foreign language must be approved by each student's advisory committee.
- 3. The foreign language and statistic requirements for the doctoral degree may be fulfilled in several ways:
 - a. The Doctor of Education does not require foreign language proficiency. However, the student must establish proficiency in statistics or computer science either by examination or by completing a prescribed course sequence, the credit hours for which do not apply toward a degree.
 - b. The Doctor of Philosophy degree requires either (a) proficiency in two languages, (b) proficiency in one language and in statistics or computer science depending on emphasis chosen or (c) proficiency in one language and the completion of a nine-hour minor, the hours for which do not apply toward the degree. Students preparing for advanced teacher certification or who plan to seek careers in teacher preparation must complete the doctoral statistics proficiency requirements.

Statistics requirements may be met by choosing nine hours of the following or by approval of the adviser.

	Hours
REF 602 - Introduction to Educational Statistics	3
PSY 761 - Experimental Design.....	3
PSY 764 - Factor Analysis	3
REF 761 - Experimental Design.....	3
REF 762 - Advanced Regression Analysis.....	3
REF 893 - Advanced Educational Research.....	3

Core Requirements for Doctoral Degree

	Hours
PED 701 - Advanced Physiology of Exercise	3
PED 702 - Physiology of Exercise Laboratory.....	2
PED 720 - Problems of Administration in Physical Education.....	3

Requirements for an Emphasis in Administration and Teaching

	Hours
EDA 620 - Supervision and Instruction.....	3
EDA 710 - School Law.....	3
PED 680 - Research Techniques.....	3
PED 716 - Perceptual-Motor Problems: Diagnosis and Remediation	3
PED 742 - Curriculum Problems in Physical Education.....	3
PED 744 - Foundations and Trends in Physical Education	3
PED 780 - Graduate Seminar	1
PED 796 - Practicum in Physical Education.....	2-6
PED 804 - Principles of Design and Construction of Tests in Physical Education	3

PED 821 - Management of HPER Programs	3
PED 845 - Research on Teaching Physical Education	3
PED 898 - Dissertation	12
Electives.....	<u>12</u>
	Minimum: 65

Requirements for an Emphasis in Exercise Physiology

	Hours
PED 703 - Advanced Kinesiology	3
PED 706 - Cardiovascular Physiology	3
PED 730 - Fundamentals of Cardiac Rehabilitation	3
PED 780 - Graduate Seminar.....	1
PED 801 - Physiological Effects of Motor Activity	3
PED 805 - Advanced Exercise Physiology II.....	3
PED 805L - Advanced Exercise Physiology II Laboratory	3
PED 807 - Functional Evaluation and Exercise Testing	3
PED 831 - Gross Anatomy	3
PED 832L - Gross Anatomy Laboratory	2
PED 833 - Nutrition and Human Performance	3
PED 834 - Biomechanical Analysis of Sports Skills	3
PED 898 - Dissertation	12
Minor Field of Study	12

Chemistry Option (6-7 hours)

Biochemistry

CHE 521 - Biochemistry I.....	3
CHE 522 - Biochemistry II.....	3

or

Clinical Chemistry

MTC 504 - Advanced Clinical Chemistry I	3
MTC 509 - Advanced Clinical Chemistry II	4
	Minimum: 70

SCHOOL OF HOME ECONOMICS

Erskine R. Smith, Director
Hattiesburg, MS 39406-5035
(601) 266-4679

The School of Home Economics offers the Master of Science and Specialist in Education degrees. The Master of Science degree is offered for majors in Family Life Studies, Home Economics, and Institution Management. A Specialist in Education degree is available in Home Economics. These graduate programs are oriented toward meeting career objectives in the areas administered by the School and in meeting the interests and personal goals of the student. All programs have minors and/or emphasis areas that allow for specialization in specific areas along with courses emphasizing the foundations of knowledge inherent in the major.

Requirements for Admission

Admission to the Graduate School for study in the School of Home Economics requires a grade point average of 2.75 and a GRE score of at least 850 (see General Admission Requirements). Individuals not meeting these requirements may be admitted to a graduate program as conditional students if they have been approved by the Director of the School

of Home Economics, the Dean of the College of Health and Human Sciences and the Dean of the Graduate School. Successful completion of one semester of curriculum (i.e., 3.0 GPA in 9 hours) will enable a student to achieve regular status. In addition to the Graduate School criteria for regular admission, graduate work in the major and minor fields of specialization must be preceded by course work sufficient to satisfy undergraduate requirements or enough related work to indicate the student's ability to do graduate work in the major and minor fields. Deficiencies in the student's background may be made up by taking and/or auditing recommended undergraduate courses.

Anyone holding a bachelor's degree from an accredited institution may be admitted as a non-degree student with the permission of the Director of the School. A non-degree student is not considered to be in a graduate program leading to a degree. If the student demonstrates proficiency in graduate work by obtaining at least a 3.0 average in at least 9 hours, he or she may make application for a graduate degree program and, if approved, the student may apply up to 9 semester hours of work taken as a non-degree graduate student to the degree program.

Requirements for Graduation

In the School of Home Economics, the minimum requirement for a master's degree is thirty (30) semester hours. Most majors offer thesis and non-thesis options; the requirements for these differ. Comprehensive exams (both oral and written) may be required in lieu of, or in addition to, completion of a thesis. The specialist's degree requires a minimum of thirty-three (33) semester hours past the master's degree, a research problem, and one semester of full-time residency. Consult the specific degree programs for their requirements.

MASTER'S PROGRAMS

FAMILY LIFE STUDIES

Students majoring in Family Life Studies may elect to emphasize Child Development, Family Relations, Interdisciplinary Gerontology, or Marriage and Family Therapy. Each program is individually planned with the help of an adviser to meet the specific needs of the student.

Based on research, theory, and practical experience, the Child Development emphasis focuses on human development and behavior from the prenatal period through early childhood. Supervised experiences in the Center for Child Development enable students to observe and interact with infants, toddlers, and young children. Through these experiences, students increase their understanding of the developmental stages of human behavior and interpersonal relations in families or in group care settings. Students earning a master's degree with an emphasis in Child Development may prepare for careers as teachers and/or administrators in child care centers, child development specialists with the Cooperative Extension Service, child life specialists with hospitals or clinics, or teachers of child development in junior colleges.

The Family Relations emphasis draws from family research and theory as well as the behavioral sciences to study the interactions among individuals, groups, and societal forces as they impact personal and social well-being within the context of couple, marriage, family, and peer relationships. The Family Relations area is also concerned with enabling students to develop methods of enriching personal and family life. Through coursework focusing on human development and interactions within the context of courtship, early marriage, parenthood, and the middle and late years, students of Family Relations gain perspectives on interpersonal, marital, and family behaviors. A practicum enables students to gain actual experience in planning, implementing, and evaluating family life programs in various settings. The master's degree with an emphasis in Family Relations provides students with the academic requirements that lead to certification as a Family Life Educator through the National Council on Family Relations (NCFR).

Students emphasizing Family Relations may prepare for a career as a family life specialist with the Cooperative Extension Service, a family life education teacher in a junior college, or a family life specialist in a community-based agency which serves families or which specializes in serving children and youth or the elderly.

The emphasis in Marriage and Family Therapy is a two-year degree program that combines academic coursework and supervised clinical experiences with couples, individuals, and families. It is designed to focus on the integration of theory, research, and clinical practice throughout the family life span. The contextual and ecological aspects of family treatment are emphasized. The program consists of (1) the conceptual study of family dynamics, family systems and subsystems, and family development; (2) personality, individual development, family evaluation and assessment, research methods and therapy; (3) supervised clinical experience with individuals, couples, and families presenting a wide range of problems; and (4) professional socialization, legal, and ethical considerations. Graduates of the program will be prepared to fill marriage and family therapy leadership roles in both public and private agencies, hospitals, and industry.

The emphasis in Interdisciplinary Gerontology draws from a number of fields, including Family Relations, Psychology, Sociology, Recreation, Adult Education, Physiology, Nursing, and Social Work. The student who wishes to major in Family Life Studies with an emphasis in interdisciplinary gerontology is required to complete a practicum in the field of aging. Opportunities to work with "well" elderly individuals and/or their families are provided through the Hattiesburg Senior Services Center, a closely supervised laboratory established especially for this purpose. Because of the growing number of elderly, jobs in the field of aging will continue to expand. Persons entering occupations which impact the elderly increase their opportunities for employment by taking coursework in gerontology and by gaining work experience with the elderly and their families.

Students majoring in Family Life Studies and planning to pursue further graduate study will find the program to be flexible enough to meet their special needs. Students choosing the Child Development emphasis may minor in areas such as sociology, interdisciplinary gerontology, family relations, or psychology. Students choosing the Family Relations emphasis may minor in areas such as sociology, interdisciplinary gerontology, child development, or psychology.

Requirements for an Emphasis in Family Relations (30 hour minimum)

Thesis Program Requirements

REF 601 (3 hours)
FAM 550 (3 hours)
FAM 551 (3 hours)
FAM 650 (3 hours)
FAM 651 (3 hours)
FAM 653 (3 hours)
FAM 698 (6 hours thesis)
Electives (6 hours)

Non-Thesis Program Requirements

REF 601 (3 hours)
FAM 550 (3 hours)
FAM 551 (3 hours)
FAM 650 (3 hours)
FAM 651 (3 hours)
FAM 653 (3 hours)
FAM 690 (3 hours)
Electives (9 hours)

**Requirements for an Emphasis in
Marriage and Family Therapy
(51 hour minimum)**

Required Courses:

FAM 550 (3 hours)	FAM 790 (9 hours practicum)
FAM 650 (3 hours)	CPY 712 (3 hours)
FAM 651 (3 hours)	PSY 555 (3 hours)
FAM 655 (3 hours)	REF 601 (3 hours)
FAM 656 (3 hours)	*Electives (9 hours)
FAM 659 (3 hours)	

*Students must have at least one course in family law.

**Select two from the following:
(6 hours)**

FAM 551 (3 hours)
FEM 545 (3 hours)
NSG 660 (3 hours)

**Requirements for an Emphasis in
Child Development
(30 hour minimum)**

Thesis Program Requirements:

REF 601 (3 hours)
CD 698 (6 hours Thesis)
Major Field (12 hours)
Minor Field (9 hours)

Non-Thesis Program Requirements:

REF 601 (3 hours)
Major Field (18 hours)
Minor Field (9 hours)

**Requirements for an Emphasis in
Interdisciplinary Gerontology
(30 hour minimum)**

Thesis Program Requirements:

REF 601 (3 hours)
CHS 525 (3 hours)
FAM 553 (3 hours)
FAM 653 (3 hours)
*FAM 690 (3-6 hours practicum)
FAM 698 (6 hours)
REC 552 (3 hours)

**Other courses in gerontology
(6 hours)

Non-Thesis Program Requirements:

REF 601 (3 hours)
CHS 525 (3 hours)
FAM 553 (3 hours)
FAM 653 (3 hours)
*FAM 690 (3-6 hours practicum)
REC 552 (3 hours)

**Other courses in gerontology
(9-12 hours)

*Placement must be in the field of aging.

**Chosen with permission of the graduate committee.

**Requirements for a Minor in
Interdisciplinary Gerontology**

A graduate student in the Department of Family Life Studies and Home Economics Education may earn a minor in Interdisciplinary Gerontology by completing a minimum of 12 hours of graduate level courses which have been approved by the student's adviser.

A practicum in the field of aging is strongly recommended. The courses for the minor may be selected from the following:

- *FAM 553 The Family in Later Life
- *FAM 653 Aging and the Family
- *FAM 654 Special Topics in Gerontology
- FAM 690 Practicum
- PSY 556 Psychology of Aging and Death
- PED 801 Physiology of Aging
- SOC 524 Sociology of Aging
- REC 552 Gerontology and Therapeutic Recreation
- ADE 580 Applied Educational Gerontology
- ADE 750 Education and the Older Adult
- SWK 675 Social Work Practice with Persons in Mid and Late Life
- NSG 606 Death and Bereavement
- *Required course.

HOME ECONOMICS

Students earning the Master of Science degree in Home Economics may emphasize Family Economics and Management, Food and Nutrition, or Home Economics Education. Students planning further graduate study will find the program flexible enough to accommodate their special needs and interests.

The emphasis in Family Economics and Management prepares students who are interested in consumer-related positions in business and industry. Such positions may be with financial institutions, retailers, marketing companies, utility companies, manufacturers, publishers, etc. The Cooperative Extension Service also seeks persons holding a master's degree in Home Economics with this emphasis. Topics typically studied include socioeconomic problems of families and consumer economics. A minor in business administration (finance, marketing, or management), communications, journalism, counseling psychology, or a related field is suggested.

The Food and Nutrition emphasis is designed for individuals who want to specialize in the study of nutrition and the impact of food choices and diet on nutrition status. Depending on the student's background and interests, appropriate courses in biochemistry, physiology, adult education, psychology, and health and safety education supplement the major course work in nutrition. Students have the opportunity to develop their research interests in human and experimental nutrition, or in community nutrition, with faculty qualified in each of these areas. Students with appropriate prerequisites may complete the Coordinated Program in Dietetics to become eligible to write the registration examination given by the American Dietetic Association upon graduation.

Students may continue their professional development in the teaching profession by emphasizing in Home Economics Education. For those seeking certification in Occupational Home Economics, HEE 612 (6 hours) and HEE 509 are required. HEE 612 may not be used to fulfill master's degree requirements; however, it may be applied toward the Education Specialist degree. The emphasis in Home Economics Education focuses on program planning, implementation, and evaluation. Course work is provided on topics such as consumer economics, curriculum development, occupational home economics, family life education, supervision, evaluation, methods and materials, information technology, special needs students, and adult education. The program provides professional growth and development primarily for persons employed in the public schools or junior colleges and with the Cooperative Extension Service. A minor in a specialized area of home economics is advised.

**Requirements for an Emphasis in
Family Economics and Management
(30 hour minimum)**

Thesis Program Requirements:

REF 601 (3 hours)
FEM 698 (6 hours)
FEM 690 (3 hours)
*Other FEM courses (9 hours)
*Electives in Home Economics
or related area (9 hours)

*Chosen with permission of major professor.

Non-Thesis Program Requirements:

REF 601 (3 hours)
FEM 690 (3 hours)
*Other FEM courses (12 hours)
*Electives in Home Economics
or related area (12 hours)

Requirements for an Emphasis in Food and Nutrition

**Thesis Program Requirements:
(33 hours)**

REF 601, 602 (6 hours)
FN 664 (3 hours)
FN 691 (6 hours)
FN 693 (3 hours)
Other related courses (15 hours)

**Non-Thesis Program Requirements:
(36 hours)**

REF 601, 602 (6 hours)
FN 664 (3 hours)
FN 692 (3 hours)
FN 693 (3 hours)
Other related courses (9 hours)
Minor field (12 hours)

**Requirements for an Emphasis in
Home Economics Education
(30 hours minimum)**

Thesis Program Requirements:

REF 601, 607 (6 hours)
HEE 607 (3 hours)
HEE 698 (6 hours)
Other HEE courses (9 hours)
*Electives in Home Economics
or related area (6 hours)

*These elective hours may be chosen from various areas with permission of the major professor.

Non-Thesis Program Requirements:

REF 601, 607 (6 hours)
HEE 607 (3 hours)
Other HEE courses (12 hours)
*Electives in Home Economics
or related area (9 hours)

INSTITUTION MANAGEMENT

The graduate program in Institution Management is designed for individuals interested in additional course work in food service management, administrative dietetics, hotel management, restaurant management, or tourism. Students complete the core courses and a thesis or a minor in business administration, recreation, or an approved area, and elect courses in their area of specialization with the adviser's approval.

Students with appropriate prerequisites may complete the Coordinated Program in Dietetics to become eligible to write the registration examination given by the American Dietetic Association upon graduation.

Those selecting the thesis option have the opportunity to work with qualified graduate faculty in research areas in food service, hotel and restaurant, and hospitality management.

Requirements for the Major in Institution Management

Thesis Program Requirements: (33 hours)

REF 601, 602 (6 hours)
IAD 674 (3 hours)
IAD 693 or HRA 693 (3 hours)
IAD 698 (6 hours)
Other related courses (15 hours)

Non-Thesis Program Requirements: (36 hours)

REF 601 (3 hours)
IAD 674, 676 (6 hours)
IAD 693 or HRA 693 (3 hours)
Minor (12 hours)
Other related courses (12 hours)

SPECIALIST IN EDUCATION

The Specialist in Education degree offered by the School of Home Economics is taken after earning a master's degree or its equivalent in Home Economics and is intended primarily for those persons pursuing teaching careers in high schools and junior colleges. The Specialist's degree in Home Economics currently meets the Mississippi State Department of Education requirements for AAA certification for those who already hold AA certification. The curriculum for the Specialist's degree is purposely designed to be flexible so that candidates may choose courses of greatest need. The student must meet University requirements for admission to graduate study at the specialist's level, including a GRE score of 900.

The specialist's degree requires the completion of at least thirty-three (33) semester hours beyond the master's degree. A minimum of nine (9) hours of Home Economics Education, REF 602, and a research problem (6 semester hours) are required. The remaining fifteen (15) hours may be chosen from home economics subject matter courses. Other courses may be selected with permission of the major professor. Nine hours must be completed during one semester of full-time study in residence on the Hattiesburg Campus. HEE 612 may be applied toward the Ed.S. degree.

SCHOOL OF NURSING

R. Joyce Bain, Interim Director
Mary H. Huch, Assistant Director
Hattiesburg, MS 39406-5095
(601) 266-5445
Hattiesburg-Meridian Department
Estelle Kurtz, Chair
(601) 266-5471
Gulf Park Department
Cynthia Chatham, Interim Chair
Long Beach, MS 39560
(601) 865-4517

MASTER OF SCIENCE DEGREE PROGRAM

The School of Nursing offers majors leading to the Master of Science degree in Community Health Nursing, Nursing Service Administration, and Psychiatric Nursing. Students selecting a major in Community Health Nursing or Psychiatric Nursing are required to select a functional role in Nursing Service Administration, Nursing Education, or Clinical Specialization. Students selecting the Nursing Service Administration major are required to select the clinical area of Community Health Nursing or Psychiatric Nursing.

The purposes of the master's program in nursing are to provide advanced study in nursing practice and role development and to provide a foundation for doctoral study.

The purposes of the Community Health Nursing major are to prepare nurses to assume leadership roles in community health and to develop nursing programs designed to meet community health needs.

The Psychiatric Nursing major prepares the graduate for advanced practice with individuals, families, and groups in a variety of settings.

The Nursing Service Administration major is designed to prepare graduates for administration responsibilities in primary, secondary, and tertiary health care facilities.

Admission Requirements

In addition to meeting the University of Southern Mississippi requirements for admission to graduate study, the master's program applicant must have:

- 1. Graduated from a National League for Nursing accredited baccalaureate program.
- 2. A 3.0 Grade Point Average (GPA) in undergraduate Nursing courses.
- 3. Completed an introductory course in statistics.
- 4. Physical assessment skills (Community Health Nursing Requirement).
- 5. A minimum composite score of 850 in the verbal and quantitative sections of the **Graduate Record Examinations** (GRE). The applicant must have acceptable scores in each section.
- 6. Registered nursing license.

Exceptions to the above criteria must be approved by the major adviser, the Director of the School of Nursing, and the Dean of the Graduate School.

Academic Progression

A student must obtain 1) a minimum grade of B in each nursing course; 2) a minimum grade of C in each non-nursing course; and 3) an overall 3.0 GPA. If the grade point average falls below 3.0, the student is placed on conditional status by the School. Failure to attain a 3.0 cumulative grade point average within the next 9 hours of study will result in denied progression in graduate nursing courses.

Students in clinical agencies must adhere to agency guidelines.

Curriculum:

Thirty-nine (39) credit hours are required to complete the program: 13 hours in the core, 16 hours in the major, 10 hours in the clinical or functional role area.

Depending upon enrollment and resources, all nursing majors may not be available at Hattiesburg and Gulf Park Campuses.

Core:	Hours
NSG 600 Issues in Nursing and Health Care	1
NSG 601 Theory Development in Nursing.....	3
NSG 603 Nursing Research.....	3
NSG 698 Thesis or NSG 692 and Elective.....	6
	<hr/> 13

MAJORS:

Nursing Service Administration	Hours
NSG 612 Concepts of Organizational Behavior in Nursing.....	3
NSG 618 Role of Nurse Administrator.....	2
NSG 618L Role Practicum.....	2
NSG 619 Fiscal Management for Nurses	3
NSG 679L Nursing Administration Practicum.....	3
Elective	3
	<hr/> 16

Community Health Nursing	Hours
NSG 621 Theories of Community Health Nursing	3
NSG 622 Seminar in Community Health Nursing.....	2
NSG 622L Community Health Nursing Practicum.....	2-3
NSG 623 U.S. and World Community Health Nursing Issues.....	3

NSG 623L U.S. and World Community Health Nursing Practicum.....	2
Elective.....	3
	<hr/>
	16

Psychiatric Nursing**Hours**

NSG 631 Theories of Psychiatric Mental Health Nursing.....	3
NSG 631L Theories Practicum.....	1
NSG 632 Psychiatric Nursing with Groups.....	2
NSG 632L Psychiatric Nursing Practicum.....	2-5
NSG 633 Psychiatric Nursing of Families	2
Elective	3
	<hr/>
	16

ROLE AREAS:**Clinical Specialization****Hours**

NSG 613 Clinical Specialist in Nursing	3
NSG 614L Clinical Specialist Practicum.....	4
Elective	3
	<hr/>
	10

Nursing Education**Hours**

NSG 611 Curriculum and Teaching in Nursing	3
NSG 678 Seminar in Teaching.....	2
NSG 678L Teaching Practicum.....	2
Elective	3
	<hr/>
	10

Nursing Service Administration**Hours**

NSG 612 Concepts of Organizational Behavior in Nursing.....	3
NSG 618 Role of Nurse Administrator.....	2
NSG 618L Role Practicum.....	2
Elective	3
	<hr/>
	10

CLINICAL COMPONENT FOR NURSING SERVICE**ADMINISTRATIVE MAJOR:****Community Health Nursing****Hours**

NSG 621 Theories of Community Health Nursing	3
NSG 622 Seminar in Community Health Nursing.....	2
NSG 622L Community Health Nursing Practicum.....	2
Elective	3
	<hr/>
	10

Psychiatric Nursing**Hours**

NSG 631 Theories of Psychiatric Mental Health Nursing.....	3
NSG 632 Psychiatric Nursing with Groups.....	2
NSG 632L Psychiatric Nursing Practicum.....	2
Elective	3
	<hr/>
	10

Financial Assistance:

Traineeships may be available from federal and state funding sources dependent on the area of study selected. Financial assistance also is available from the Financial Aid Office of the University. Funding resources are subject to change, and payback clauses may be part of the funding agreement.

SCHOOL OF SOCIAL WORK

Geraldine Parish, Acting Director
Hattiesburg, MS 39406-5114
(601) 266-4163

The School of Social Work has met the educational requirements of the Council on Social Work Education and is a fully accredited program at the master's degree level (M.S.W.).

The School of Social Work's curriculum emphasizes a body of knowledge and advanced practice skills that will prepare the student to practice in a variety of service delivery settings utilized in behalf of individuals, groups, families, organizations, and communities. The advanced foundation and elective courses offer students the type of generalists underpinning which will prepare them with the appropriate knowledge and intervention skills to practice in areas of mental health/mental retardation, family and children's services, services to older persons, health and social welfare policy and administration.

The human services agencies throughout the State of Mississippi are potential employers of those students who successfully complete the M.S.W. degree program.

Graduate students admitted to the Master of Social Work (M.S.W.) program may qualify for the following educational plans:

1. The regular Master of Social Work program requiring a **minimum** of four semesters (18 months): fall and spring semesters of two academic years;
OR
2. Advanced Standing into the Master of Social Work program which begins the fall term of each program year. Advanced Standing is for students who meet admission requirements and hold a bachelor's degree in social work from a CSWE accredited undergraduate social work program.

MASTER OF SOCIAL WORK

Regular Master of Social Work Program

First year students enroll in the fall semester. Full-time first year students will have concurrent field placement and classroom courses. Tuesdays and Thursdays will be spent in field placement. During the second year, students will be in classroom courses for the first semester and in an advanced placement four days each week during the second semester. Fridays will be spent on campus. A minimum of 60 credit hours is required for graduation.

Advanced Standing into the Master of Social Work Program

Students accepted into the advanced program enter in the fall semester, which is devoted to academic coursework. Advanced Standing is for the students who meet admission requirements and hold a bachelor's degree in social work from an accredited undergraduate social work program.

The School's Admissions Committee will review all undergraduate social work courses as submitted by an Advanced Standing applicant and recommend credit for advance standing up to a maximum of fifteen (15) hours. In order for Advanced Standing students to begin field placement by the spring semester, they must be credited with at least twelve (12) hours. Students receiving less than twelve (12) hours of advanced credit will need to complete two (2) full semester placements.

Regular Program on Part-time Basis

The School, in keeping with its admissions requirements, offers a part-time educational program designed primarily for practitioners working full-time, in which two semesters of classroom instruction may be completed over an extended period of time (up to five

years), with the final two semesters of field and classroom instruction being completed as full-time students in residence. Evening courses, offered on several USM designated campuses in the state, provide part-time social work students with additional educational opportunities. All students are assigned a faculty adviser. (For admission requirements, see below.)

Requisites for the M.S.W. Degree

Students must have a **3.0** grade average in academic coursework and a **3.0** grade average in field practicum.

All required courses must be successfully completed.

A **minimum** of sixty (60) hours is required for graduation in the regular M.S.W. program; a **minimum** of forty-five (45) hours is required for graduation after admission with Advanced Standing.

Admission Requirements

Applicants to the School of Social Work are selected and admitted without discrimination on the basis of sex, race, religion, color, or national origin.

- A. Regular students, full-time or part-time, are admitted on the basis of the following factors: a bachelor's degree from an accredited college or university; a **minimum** undergraduate grade point average (GPA) of 2.75 on a 4.0 scale; a **minimum combined** score of 850 on the **Graduate Record Examinations** (verbal and quantitative sections); academic background; references; and a written personal statement from the applicant. All of these factors are evaluated by the Admissions Committee. It is the desire of the School to see each applicant prior to completion of the admission process. In most cases, an interview with the applicant by a faculty member is required to support the application process. The evaluation results of the faculty member will then be submitted to the School's Admissions Committee.
- B. Additional requirements for Advanced Standing are an undergraduate social work degree from a CSWE accredited program, a GPA of 3.0 in undergraduate social work courses, an undergraduate field experience under a supervisor who holds an M.S.W. degree.
- C. Admission into the School of an applicant with prior status of "graduate non-degree" is contingent upon a **3.0** or above average in the graduate social work courses taken prior to admission. In addition, the applicant must meet the regular admission requirements as listed in section A above. No more than nine (9) credit hours may be transferred toward the graduate degree from the "non-degree" status. Therefore, after nine (9) hours have been accrued, non-degree students must apply for and receive admission into the School of Social Work in order to receive credit for additional course hours.

The School adheres to the University policies with regard to admission of graduate students on a "conditional" basis. **Students with conditional admission are not eligible for Advanced Standing.** The University regulations concerning "conditional admissions" for regular or part-time students are stated in this **Bulletin** under "Admissions Requirements and Procedures."

Applications for admission must be accompanied by a copy of the student's **Graduate Record Examinations** Score (verbal and quantitative sections) and a copy of a transcript covering at least the final two years of undergraduate study. Applicants for Advanced Standing must also supply course descriptions of undergraduate social work courses taken.

All admission requirements must be completed by the University admission deadline for fall semester admission. The **Graduate Record Examinations** is given only at specified times during the year, and there is a delay of about six (6) weeks before the University receives the student's scores after the GRE is taken. Therefore, since GRE scores are required for admission, the applicant should allow sufficient time for the completion of an application. For further information, write or call:

Coordinator of Admissions
School of Social Work
University of Southern Mississippi
Hattiesburg, Mississippi 39406-5114
Telephone (601) 266-4163

CENTER FOR COMMUNITY HEALTH

Lynn Cook Hartwig, Director
Hattiesburg, MS 39406-5122
(601) 266-5437

The Center for Community Health was created as an organizational focus for expanded activities in community health within the College of Health and Human Sciences. Initial offerings from the Center include the areas of Health Education and Health Policy and Administration within the Master of Public Health (M.P.H.) degree. The Center also offers the undergraduate and Master of Science degrees in Health Education preparing students to work with individuals and communities as they make lifestyle decisions that affect their health. The Center serves as a base for interdisciplinary research and demonstration activities in such areas as rural health policy, community programs for the elderly, access to health care for vulnerable populations, and disease prevention and health promotion.

Admission to the master's programs requires an acceptable score on the **Graduate Record Examinations** (850 combined verbal and quantitative scores), a GPA of 2.75 or higher at the baccalaureate level, and a minimum of an undergraduate minor (or its equivalent) in an appropriate* field of study. A personal interview with a member of the graduate faculty is highly recommended.

Written and oral examinations are required of all graduate students in the master's program. Requests to take the comprehensive examination must be made in writing the semester prior to administration of the examination. The request should be sent to the Director of the Center, and the following typed information is to be included:

- A. Applicant's name as it appears on official school records
- B. Social Security number
- C. Emphasis area
- D. Applicant's address and telephone number (during semester in which examination will be taken)

All general Graduate School requirements outlined earlier in this **Bulletin** must be satisfied for students to progress successfully toward degrees. Regardless of degree level pursued, the student is responsible for following all graduate regulations. The student's major professor will assist, but the student is expected to know what is required and to take full responsibility.

*Specific competencies for admission are determined by each area.

MASTER OF PUBLIC HEALTH (M.P.H.)

Graduates of the recently approved M.P.H. will find career opportunities in all sectors of the health care field including health service delivery organizations, community organizations, federal, state and local health agencies, colleges and universities, voluntary health agencies, consulting firms, industry, and insurance companies. Students will usually take forty-five (45) credit hours. A minimum of thirty-six (36) hours may be approved for those with terminal degrees or considerable experience.

M.P.H. Core Requirements

	Hours
CHS 601 - Community Health Organization and Practice	3
CHS 622 - Epidemiology	3
CHS 623 - Biostatistics.....	3
CHS 655 - Environmental Health	3
CHS 525 - Health Administration	3
CHS 656 - Social and Behavioral Aspects of Health	3
CHS 611 - Internship	3-9
CHS 792 - Special Problems in Health.....	3

Requirements for Emphasis in Health Education

CHS 509 - Community Health Education Planning	3
CHS 512 - Measurement and Evaluation.....	3
CHS 720 - Community Organization for Health Education.....	3
Electives.....	6-12

Requirements for Emphasis in Health Policy and Administration

CHS 527 - U.S. Health Policy and Policy Analysis	3
CHS 657 - Financial Aspects of Health Administration.....	3
Management/Policy Electives	9-15

**MASTER OF SCIENCE
HEALTH EDUCATION****Requirements for Emphasis in Community Health Education**

This program prepares students for professional careers in a variety of community health education programs. Although the preferred undergraduate major for entry into this program is community health education, other undergraduate majors provide good backgrounds for this study. Students with undergraduate majors other than health education who wish to pursue these studies will have their credentials evaluated by the Center. The program generally requires a minimum of three semesters of study.

	Hours
CHS 508 - Health Education Methods.....	3
CHS 509 - Community Health Education Planning	3
CHS 512 - Measurement and Evaluation in Health Education	3
CHS 525 - Health Administration	3
CHS 527 - Health Policy.....	3
CHS 611 - Internship in Community Health	9
CHS 622 - Epidemiology	3
CHS 623 - Biostatistics.....	3
CHS 680 - Research Techniques	3
CHS 698 - Thesis	6
CHS 710 - Seminar	3
CHS 720 - Community Organization for Health Education.....	3

Minimum: 45

Requirements for an Emphasis in Occupational Safety and Health

This program of study prepares students for professional careers in safety and health in industrial settings and in certain “loss control” programs. The preferred program entry-level competencies are: knowledge of foundation of safety and health, skill in communications, knowledge of individuals and groups, and professional experience in fields of safety and/or health. The program generally requires a minimum of three semesters of study. All students without prior safety experience must complete an internship in an approved industrial or health facility setting.

Minimum Course Work Requirements With Thesis

	Hours
CHS 527 - Health Policy.....	3
CHS 611 - Internship in Community Health	9
CHS 622 - Epidemiology	3
CHS 623 - Biostatistics.....	3
CHS 638 - Workplace Health Promotion	3
CHS 680 - Research Techniques	3
CHS 692 - Special Problems in Safety or CHS 792	3
CHS 698 - Thesis	6
CHS 744 - Behavioral Problems in Safety Programs	3
CHS 746 - Administration and Supervision of Safety Programs.....	3
Minimum:	39

Minimum Course Work Requirements Without Thesis

	Hours
CHS 509 - Community Health Education Planning	3
CHS 527 - Health Policy.....	3
CHS 538 - Workplace Health Promotion	3
CHS 611 - Internship in Community Health	9
CHS 622 - Epidemiology	3
CHS 623 - Biostatistics.....	3
CHS 640 - Traffic Systems Management	3
CHS 655 - Environmental Health	3
CHS 680 - Research Techniques	3
CHS 692 - Special Problems in Safety or CHS 792	3
CHS 744 - Behavioral Problems in Safety Programs	3
CHS 746 - Administration and Supervision of Safety Programs.....	3
Minimum	42

Requirements for Emphasis in Safety and Driver Education

This program of study provides students with further competencies in the field of safety and driver education. Students who wish to pursue these studies should review the teacher certification requirements of the state in which they plan to teach. All students must possess the basic driver education certification requirements to enter the program.

Minimum Course Work Requirements with Thesis

	Hours
CHS 680 - Research Techniques	3
CHS 698 - Thesis	6
HSE 740 - Facilities & Equipment in Driver Education Programs	3
HSE 741 - Multi-Media Systems in Driver Education Programs	3
HSE 742 - Organization & Administration of Driver & Traffic Safety Education	3
HSE 743 - Addictive Substances as Related to Traffic Safety Education	3
CHS 744 - Behavioral Problems in Safety Programs	3
CHS 745 - Safety Education	3
REF 602 - Introduction to Education Statistics	3
REF 607 - Basic Course in Curriculum Development	3
Minimum:	<u>33</u>

Minimum Course Work Requirements Without Thesis

	Hours
HSE 588 - Motorcycle Safety Education	3
CHS 680 - Research Techniques	3
HSE 711 - Advanced Personal and Community Hygiene	3
HSE 740 - Facilities & Equipment in Driver Education Programs	3
HSE 741 - Multi-Media Systems in Driver Education Programs	3
HSE 742 - Organization & Administration of Driver & Traffic Safety Education	3
HSE 743 - Addictive Substances as Related to Traffic Safety Education	3
CHS 744 - Behavioral Problems in Safety Education	3
CHS 745 - Safety Education	3
REF 602 - Introduction to Educational Statistics	3
REF 607 - Basic Course in Curriculum Development	3
Minimum:	<u>33</u>

COLLEGE OF LIBERAL ARTS

Graduate Degrees 1990-1991

School/Department	Major	Degree
Master's Level		
School of Communication	Communication	Master of Arts Master of Science
	Public Relations	Master of Science
School of Library Science	Library Science	Master of Library Science
School of Public and International Affairs	Criminal Justice	Master of Arts Master of Science
	Administration of Justice Emphasis	
	Correctional Administration Emphasis	
	Approaches to Problems and Research in Criminal Justice Emphasis	
	Comparative and Theoretical Criminal Justice Emphasis	
	Juvenile Justice Emphasis	
	Geography and Area Development	
	Economic Development	Master of Science
	Geography	Master of Arts Master of Science
	Political Science	
English	Political Science	Master of Arts Master of Science
	Public Administration Emphasis (MS)	
	English	Master of Arts Master of Science
	Creative Writing Emphasis (MA)	
History	History	Master of Arts Master of Science
Philosophy and Religion	Philosophy	Master of Arts
Sociology and Anthropology	Anthropology	Master of Arts Master of Science
Speech and Hearing Sciences	Speech and Hearing Sciences	Master of Arts Master of Science
	Audiology Emphasis	
	Speech-Language Pathology Emphasis	
	Education of the Deaf Emphasis	

Specialist's Level

English

English

Specialist in English

Doctor's Level

Communication

Communication

Doctor of Philosophy

English

English

Doctor of Philosophy

Creative Writing Emphasis

History

History

Doctor of Philosophy

Speech and Hearing Sciences

Speech and Hearing
Sciences

Doctor of Philosophy

COLLEGE OF LIBERAL ARTS

Glenn T. Harper, Dean
Maureen Ryan, Assistant Dean
Hattiesburg, MS 39406-5004
(601) 266-4315

The College of Liberal Arts offers the Doctor of Philosophy, the Master of Philosophy, the Specialist, the Master of Arts, and the Master of Science degrees as outlined on the previous pages.

With the approval of the major professor and the chair of the major department, the student may choose a graduate minor in a cognate field, subject to the approval of the major professor and the chair of the major department.

Various departments of the College of Liberal Arts also participate with the College of Education and Psychology in programs leading to the Master of Education degree.

For general academic requirements and regulations governing each of these degree programs, see section on **Academic Requirements**. For **specific** degree requirements, consult the appropriate department.

SCHOOL OF COMMUNICATION

Gene Wiggins, Director
Hattiesburg, MS 39406-5158
(601) 266-5650

The School of Communication offers the Master of Arts, Master of Science, and the Doctor of Philosophy degrees under the joint administration of the participating areas within the Department of Journalism, the Department of Radio, Television, and Film, and the Department of Speech Communication. The Director of Graduate Studies advises all candidates regarding general regulations and requirements and serves as academic adviser until committees are formed and major professors are selected.

Master's and doctoral degree candidates select a concentration and curriculum from among the participating disciplines with the approval of the major professor and committee members. Curricula and requirements for master's candidates majoring in Communication and in Public Relations are outlined below. Note the available graduate courses listed separately under Journalism; Radio, Television, and Film; and Speech Communication, as well as the Communication course descriptions.

Master's degree candidates in Communication select one of two primary concentrations: (1) speech communication, or (2) mass communication. A separate major is available in Public Relations. Students emphasizing mass communication or majoring in public relations are required to have prior academic training or professional experience in the mass media or public relations practice. Those not meeting the requirement can be admitted into the program but will be required to correct the deficiency without receiving graduate credit for the additional work.

The Doctor of Philosophy degree program is interdisciplinary and is structured in consultation with the student's doctoral committee to serve the student's individual needs. The program involves study of advanced theories of speech communication and mass communication research design and methodology.

Admission requirements for the School of Communication are the same as those of the University, with the following additions:

Applicants for the master's programs must present a score of at least 900 on the aptitude section of the **Graduate Record Examinations**, with a minimum score of 450 on the verbal portion, and minimum grade point average of 3.0. Applicants for the doctoral program must present a score of at least 1000 on the aptitude section of the **Graduate**

Record Examinations, with a minimum of 500 on the verbal portion, and a grade point average of 3.50.

The requirements for conditional admission to the master's program shall be a GRE aptitude score of 750 with a score of 400 on the verbal portion and a grade point average of 2.75. Conditional admission requirements for the doctoral program are the same as that of the University, except the minimum GRE score shall be 900. The first nine hours after conditional admission to all graduate programs must be taken in the School of Communication.

Foreign students must score at least 550 on the TOEFL examination before they can be admitted into any graduate program in the School.

Master of Arts/Master of Science

Thesis Option

Major: Communication

All students pursuing this program in Communication must complete the following requirements:

Substantive Core	Hours
COM 600 and 625	6
Research Methods	
COM 720	3
COM 722; RTF 525, Statistics (any two).....	6
Thesis	6
Electives (in speech communication or mass communication)	9

A minimum of thirty (30) semester hours must be completed, including thesis credit. At least eighteen (18) of these hours must be numbered 600 and above. All candidates must take a comprehensive written examination, submit a scholarly thesis, and defend the thesis. In addition to minimum credit and thesis requirements, the candidate for the Master of Arts degree must demonstrate proficiency in an approved foreign language not to be counted toward the credit hours requirement.

Master of Science

Major: Communication

Non-Thesis Option

All students pursuing this program in Communication must complete the following requirements:

Substantive Core	Hours
COM 600 and 625	6
Research Methods	
COM 720	3
COM 722, RTF 525, Statistics (any two), or other appropriate courses.....	6
Electives (in speech communication or mass communication)	21

A minimum of thirty-six (36) semester hours must be completed. No more than three (3) 500-level courses may count toward the 36-hour requirement. All candidates must take a comprehensive written examination.

Master of Science

Major: Public Relations

All students pursuing a major in Public Relations must complete the following requirements:

Substantive Core	Hours
COM 600, 621, 625	9
Research Methods	
COM 720, 722, RTF 525, Statistics (any two).....	6
Thesis, major project, or internship*	3-6
Communication Electives**	9-12

*Students seeking the Master of Science degree with a major in Public Relations may choose between a thesis and a non-thesis option. Six hours credit are given for a thesis and three hours for a major project or internship.

**Students who did not have undergraduate public relations courses must take JOU 521, 522, and 525.

A minimum of thirty (30) semester hours must be completed, including thesis, major project or internship. All candidates for the Master of Science degree with a major in Public Relations must pass comprehensive written examinations, and either submit and defend a scholarly thesis, or complete a major project, or serve an approved internship.

Candidates with undergraduate deficiencies must take undergraduate courses to correct the deficiency without receiving graduate credit for the additional course work. Candidates with few undergraduate deficiencies may be permitted by their academic committees to complete a graduate minor pertinent to their area of specialized practice, e.g., social work, public administration, business administration, and criminal justice.

Doctor of Philosophy

A four-course sequence in research design and methodology is required of all doctoral students. The four courses include: COM 600 - Communication Theory and Research; COM 625 - Process and Effects of Mass Communication; COM 720 - Introduction to Graduate Research in Communication; and COM 722 - Communication Research Methods. Equivalent courses taken at another institution will be accepted, pending approval of the Director of Graduate Studies, the major professor, and the instructor of the course.

The minimum credit requirement for the doctoral degree is fifty-four (54) hours beyond the master's degree or eighty-four (84) hours beyond the baccalaureate degree. The student takes rigorous written and oral examinations and submits and defends a scholarly dissertation pertaining to the area he or she elects to emphasize (see section on General Requirements and Regulations).

Doctoral students may elect an outside minor consisting of twelve (12) hours approved by the major professor and academic committee members. Doctoral students must demonstrate proficiency in basic communication research design and methodology, as well as competency in basic statistics.

SCHOOL OF LIBRARY SCIENCE

Jeannine L. Laughlin, Director
Hattiesburg, MS 39406-5146
(601) 266-4228

The School of Library Science offers a course of study leading to a Master of Library Science degree. Since the first master's degree in library science was awarded in 1965, the program has continued to grow and develop into a truly comprehensive instructional program for all students who plan to become professional librarians in public, school, academic, or special libraries. For the general University graduate student, the School offers a variety of course offerings for acquiring skill in the scholarly use of library resources as research tools. Finally, the School performs a vital role in the continuing development and expansion of library services at all levels in the State of Mississippi as well as providing continuing education for practicing librarians.

The graduate curriculum in library science provides instruction in the following areas of librarianship: reference; cataloging and classification; selection and acquisition; administration; bibliography; non-print media; history of the book, libraries, printing and publishing; library programs for children and youth; and library automation and information science.

Providing prospective librarians with professional knowledge and skills for effective library service, however, is not the only objective of the School. The faculty believes that professional education should also be concerned with fostering those attitudes and understandings which will help students develop an appreciation of the changing role of the library in society. The library profession will flourish only as students are prepared to participate intelligently in the process of relating library services to the larger social and cultural needs of contemporary society.

Accreditation

The Master of Library Science degree is accredited by the American Library Association. The School is also an institutional member of the American Library Association, Association for Library and Information Science Education, Mississippi Library Association, and the Southeastern Library Association.

Mission of the Library School

The mission of the Library School is two-fold: (1) to prepare students for professional and paraprofessional roles in librarianship and related areas, and (2) to sensitize students to the changing information needs of a free and open society and to the aims of their chosen profession.

Goals and Objectives of the Graduate Program of Education in Library Science

Goal I.

To introduce master's degree candidates to historic and contemporary intellectual freedom issues, and to foster their commitment to the Library Bill of Rights.

Objectives.

As a result of this program the candidates will be able to:

- A. Discuss ways in which libraries as social institutions have historically advanced freedom of expression;
- B. Discuss ways in which modern libraries advance freedom of expression and promote freedom to information.

Goal II.

To cultivate in master's degree candidates an understanding of the principles of librarianship, and the requisite professional qualities of reflective thinking, critical and evaluative analysis, and effective communication.

Objectives.

As a result of this program the candidates will be able to:

- A. Articulate an understanding of professional responsibility and of the educational contribution of librarianship as a service-oriented information profession;
- B. Identify problems and demonstrate creativity and initiative in their resolution;
- C. Identify the significance of the library in the communication process;
- D. Demonstrate an understanding of the librarian's role as mediator in the communication process;
- E. Demonstrate a facility for oral and written communication.

Goal III.

To familiarize master's degree candidates with the evolution of libraries and librarianship so that they will understand the historic relationship between society and libraries, and the role of libraries in the dissemination of information and the expansion of knowledge.

Objectives.

As a result of this program the candidates will be able to:

- A. Examine and evaluate the role that libraries and librarians have played in our own and other cultures;
- B. Examine and evaluate the role of books and all other information transfer devices in the development of human culture;
- C. Identify trends that may be derived from past and present experience;
- D. Identify social challenges to the principles of librarianship, articulate methods for dealing with these challenges, and articulate a commitment to improve the quality of library service in response to the needs of all segments of society.

Goal IV.

To provide experiences which will prepare master's degree candidates to perform efficiently in libraries and to work effectively with the public.

Objectives.

As a result of this program the candidates will be able to:

- A. Identify the informational needs of library communities;
- B. Plan, administer, and evaluate information services for these groups;
- C. Select, organize, create and utilize materials to meet the needs of the library's public;
- D. Apply and evaluate technologies as they are used in the storage, retrieval, and service functions, and in the management of the library.

Goal V.

To introduce master's degree candidates to modern management theories, and to develop an awareness of the effects of technology on library management.

Objectives.

As a result of this program the candidates will be able to:

- A. Explain contemporary management theories;
- B. Explain the elements of management theory, including program planning, implementation, and evaluation;
- C. Explain the effects of technology on management.

Goal VI.

To demonstrate the value of, and encourage participation in, professional organizations and continuing education.

Objectives.

As a result of this program the candidates will be able to:

- A. Explain how participation in professional organizations benefits the individual librarian;
- B. Explain how professional organizations and publications advance the principles of librarianship;
- C. Explain the value of continuing education and other professional development activities to librarians.

Goal VII.

To introduce master's degree candidates to theoretical and applied professional research in all areas of librarianship; to develop cognizance of the role of scientific research in building a theoretical knowledge base; and to provide an experience for each student to conduct original research.

Objectives.

As a result of this program the candidates will be able to:

- A. Explain the role of scientific research and of a theoretical knowledge base in librarianship;
- B. Evaluate reports of theoretical and applied research activities;
- C. Determine appropriate research methodologies and data gathering techniques for given problems;
- D. Complete an original research project.

Admission Requirements

A graduate student in Library Science must meet the general requirements for admission to the University graduate program as outlined elsewhere in the **Graduate Bulletin**, scoring not lower than 850 on the combined Aptitude Section of the **GRE** and a grade point average of 3.00 (figured on an A equals 4.00 scale) for the last two years of undergraduate study to qualify for regular admission. For conditional admission, the School of Library Science adheres to the policies of the Graduate School as stated in the **Graduate Bulletin**. In keeping with University practice and policy, sex, religion, race,

physical disability, creed, and age play no role in the consideration of applicants for admission to the M.L.S. degree program.

In addition to the application forms which must be submitted to the Admission Office of the University, the School of Library Science requires the submission of a personal questionnaire, plus two letters of recommendation (on forms supplied). One letter of recommendation should be from a librarian. These forms may be obtained by writing to the School of Library Science, not to the Graduate School. Personal interviews with applicants will also be conducted whenever possible.

THE MASTER OF LIBRARY SCIENCE DEGREE

Candidates for the Master of Library Science (M.L.S.) degree must earn a minimum of forty-one (41) semester hours of credit with a 3.00 cumulative grade point average. Eighteen (18) of these hours must be at the 600 level of courses. A maximum of six (6) hours may be elected from the offerings of other departments within the University. A total of no more than nine (9) semester hours of transfer work and non-degree work may be applied toward the degree.

The program of study for students will be individualized, taking into consideration previous academic backgrounds, experience, and career objectives. All programs of study must be planned with the counsel of a faculty adviser and approved by the Director of the School of Library Science.

I. M.L.S. Degree Requirements

LS 501, 505, 511, 636, 651, 668

605 or 609

664 or 665 or 666 or 667

Electives (15 hours)

Master's project (2 hours)

If near equivalencies of any of the above required courses were taken on either the undergraduate or graduate level at an accredited institution with a grade of **B** or above, other electives may be substituted. Courses at the 500 level may also be waived by special examination or by the Director of the School.

All students are required to pass a media equipment competency test. This requirement may be satisfied by receiving a grade of "B" or above in LS 516 or an equivalent course.

II. Course Requirements for School Library-Media Specialist Certification at the Master's Level

Students who plan to use the master's degree in Library Science for Class AA certification should complete the following courses in addition to those listed above:

LS 517 or 518, 525, 609; 506 or 526 or 580 or 581

or 582 or 585 or 586 or 587 or 590 or 591

or 692 or 694

As of Sept. 1, 1981 the following professional education courses must be completed to satisfy certification requirements in the State of Mississippi: REF 601 and REF 607. (LS 668 may be taken in lieu of REF 601.)

Students seeking certification at the master's level are also advised that they may be required to complete more than 41 hours to meet all degree and certification requirements, especially if they do not hold a Class A Certificate in Library Science. Students should see their adviser or the Director of the School of Library Science for further information concerning certification requirements.

Changes in teacher education certification have recently been mandated by the Mississippi State Department of Education. Existing teacher education programs are subject to change contingent on formal University approval. Please consult your academic adviser for alterations pending in this program.

III. Dual Master's Degree in History and Library Science

The History Department and the School of Library Science offer a dual master's degree program leading to the Master of Arts in History and the Master of Library Science degrees. The total number of hours required for both programs is 57 — 33 for the M.L.S. and 24 for the M.A. in History.

SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS

William H. Hatcher, Director
Hattiesburg, MS 39406-5108
(601) 266-4310

The School of Public and International Affairs is a separately organized entity within the College of Liberal Arts and is comprised of three departments offering graduate degrees: Criminal Justice, Geography and Area Development, and Political Science.

DEPARTMENT OF CRIMINAL JUSTICE

Tyler H. Fletcher, Chair
Hattiesburg, MS 39406-5127
(601) 266-4509

The Department of Criminal Justice offers courses leading to a Master of Arts degree, a Master of Science degree, and a graduate minor in the master's and doctoral degree programs of other departments.

MASTER'S PROGRAMS

Master of Arts Degree

The Master of Arts degree in Criminal Justice consists of a minimum of thirty-three (33) hours of criminal justice course work, or a minimum of twenty-four (24) hours of criminal justice course work with nine (9) hours of additional course work in an approved minor. Either sequence also requires six (6) hours of CJ 698, Thesis, for a total of thirty-nine (39) hours. The Master of Arts degree program is divided into the fields noted below. CJ 525 and CJ 625 are required in all fields. A student will be required normally to select a minimum of four courses from a field concentration and a minimum of one course from each of two other fields in order to gain an appreciation of the interaction of criminal justice system components. A foreign language competency is required.

Master of Science Degree

The Master of Science degree in Criminal Justice consists of a minimum of thirty-nine (39) hours of criminal justice course work, or a minimum of thirty (30) hours of criminal justice course work with nine (9) hours of additional course work in an approved minor area, plus successful completion of a written comprehensive examination. The degree is designed to provide specialization in a designated field to meet professional needs. CJ 525 and CJ 625 are required in each option.

General Requirements for Admission

(A) Applicants who have an undergraduate major in Criminal Justice and non-degree graduate students must have achieved a grade point average of 3.0 overall and in their criminal justice courses for regular admission.

(B) Applicants must have achieved a score of at least 850 points total on the quantitative and verbal portions of the **Graduate Record Examinations** for the Master of Science degree and 900 for the Master of Arts degree. If a student is given conditional admission, he or she must have at least 750 on the GRE. In the case of international

applicants, at least 400 points of the required total must be scored in the verbal part of the GRE.

(C) In cases where considerations other than grade point averages indicate, the department may, at its discretion, grant conditional admission to undergraduate criminal justice majors and non-degree graduate students in Criminal Justice with a GPA of less than 3.0 but more than 2.75 overall and in criminal justice courses.

(D) Students with other than a criminal justice undergraduate major will be granted conditional admission if the department is satisfied that their grade point average overall and in their particular major indicates the potential to perform acceptably in the program.

(E) All admissions of students with other than a criminal justice undergraduate major or strong professional training in criminal justice will be conditional upon the completion, with a 3.0 average, of up to twelve (12) hours of undergraduate criminal justice courses consisting of CJ 330 and either CJ 341 or CJ 360, plus one other course approved by the student's adviser.

Criminal Justice Fields (Required Courses)

I. Administration of Justice

CJ 520	CJ 563	CJ 533
CJ 530	CJ 570	CJ 640
CJ 525	CJ 625	CJ 660
CJ 560	CJ 631	CJ 632

II. Correctional Administration

CJ 500	CJ 562	CJ 650
CJ 550	CJ 580	CJ 561
CJ 551	CJ 625	CJ 525
	CJ 530	

III. Approaches to Problems and Research in Criminal Justice.

CJ 520	CJ 530	CJ 625
CJ 580		CJ 640
CJ 571		CJ 660
CJ 525		

(Other courses will be added according to the student's research area.)

IV. Comparative and Theoretical Criminal Justice Studies

CJ 520	CJ 640	CJ 625
CJ 650	CJ 660	CJ 630
CJ 525	CJ 530	CJ 631
CJ 526		CJ 626
CJ 562		

V. Juvenile Justice

CJ 520	CJ 560	CJ 650	CPY 533
CJ 525	CJ 561	CJ 660	CPY 612
CJ 550	CJ 562	CPY 523	CPY 614
CJ 551	CJ 625	CPY 532	CPY 738
CJ 563			

(Selection of the Juvenile Justice specialty entails completion of forty-eight (48) hours of course work in order to comply with state policy and federal court orders governing state employees of the Department of Youth Services. An included minor of eighteen (18) hours of course work is required in psychology, counseling psychology, or social work.)

DEPARTMENT OF GEOGRAPHY AND AREA DEVELOPMENT

Jesse O. McKee, Chair
Hattiesburg, MS 39406-5051
(601) 266-4729

The Department of Geography and Area Development offers the following graduate degree programs:

1. Master of Arts and Master of Science in Geography
2. Master of Science in Economic Development

The department features coursework in geography, economic development, and urban and regional planning. The degree programs in geography stress concentrations in atmospheric science, economic development, urban and regional planning, population and cultural systems, remote sensing, cartographic techniques, and geographic information systems, balanced by staff specialties in a variety of other systematic and regional areas. All programs in geography emphasize the application of technical skills and the development of a research capability in a particular concentration.

The student is held responsible for all graduate regulations. The student's major professor will help in any way possible, but the student is expected to know what is required and to take full responsibility. General academic requirements are explained fully earlier in the **Bulletin**; departmental requirements are listed below.

MASTER'S PROGRAMS IN GEOGRAPHY

Programs falling under both the M.A. and M.S. are designed to prepare students for further graduate study and for employment in such areas as planning, area development, business, government service, or teaching. Participation in an internship program is generally available to all departmental graduate students, but particularly to those pursuing a master's planning concentration in geography or the economic development degree. Prospective students should be prepared to spend up to two years completing all degree requirements; progress may be accelerated by taking advantage of summer sessions.

The department requires a score of 850 on the **Graduate Record Examinations**, and a 3.00 grade point average over the last two years of full-time undergraduate course work. Financial aid will be awarded on a competitive basis.

Curriculum Requirements

1. A minimum of thirty-six (36) semester hours in graduate level geography courses with at least eighteen (18) hours of work in courses at the 600-level. With the approval of the major professor, the student has an option of taking (outside the department) up to twelve (12) semester hours of cognate courses within the minimum hourly requirements. Courses prefixed with a GHY, ED, or PLG may be used in any combination to satisfy the minimum required hours.
2. GHY 610 and 680. These courses are required of all students.
3. Demonstrated proficiency in cartography and statistical/quantitative methods. Proficiency is generally established (on an individual basis) by evidence of satisfactory completion of course work in these areas sometime in a student's academic career, at either the graduate or undergraduate level.
4. All students in the M.A. program will prepare a thesis. Students in the M.S. program have the option of preparing a thesis or a paper of a professional quality. The thesis will confer six (6) semester hours credit to be counted as part of the total minimum hourly requirement for the degree. The paper, which will normally be the end product of work begun in a seminar, will confer no credit hours toward the minimum required for the degree.
5. An oral examination on the student's academic program is required. Students in the M.S. and M.A. programs writing a thesis will take an oral defense of the

thesis. Students in the M.S. program taking the option of preparing a paper of professional quality will have the paper reviewed by the department faculty and will present it orally before the combined faculty.

Other Specific Requirements

In addition to the above, the following requirements are specified for those students working respectively, for either the Master of Arts or the Master of Science degrees in Geography.

Master of Arts

A reading knowledge of one approved foreign language. Proficiency in a foreign language may be established either by: (1) completion of nine (9) semester hours of an approved foreign language with a grade of C or better or (2) by satisfactorily passing the Princeton Examination in that language. Transfer credit will be evaluated on an individual basis. All evaluation related to this requirement will be accomplished by the University's Department of Foreign Languages.

Master of Science

Demonstrated proficiency in statistics or in a microcomputer usage. Proficiency is normally obtained by satisfactorily completing a two-course sequence selected in consultation with the departmental adviser. Typical sequences to establish proficiency in statistics are introductory statistics and GHY 615. Sequences for computer proficiency are CSS 240 and GHY 516 or 517. Undergraduate or transfer credit will be evaluated by the department on an individual basis.

MASTER OF SCIENCE PROGRAM IN ECONOMIC DEVELOPMENT

Ronald J. Swager, Director
Hattiesburg, MS 39406-5051
(601) 266-4729

The purpose of the Economic Development program is to assist students in acquiring professional competence in the concepts, skills, working tools, and creative approaches essential to those involved in the field of economic development, whether at the national, regional, or community level.

Admission to regular student status requires a minimum score of 850 (verbal and quantitative combined) on the **Graduate Record Examinations** (GRE) or 400 on the **Graduate Management Admissions Test** (GMAT). A minimum undergraduate grade point average of 3.00 (4.00 scale) also is required for regular graduate status.

Curriculum Requirements:

1. Successful completion of a minimum of forty-two (42) semester hours in graduate level courses as follows:
 - a. Twenty-four (24) hours of prescribed core courses selected from the following: ED 551, 651, 652 (3 hours), 653, 654, 655, 656, 657, and 658.
 - b. Any three (3) hours of Planning courses selected from the following: PLG 564, 565, 665 or 668.
 - c. Demonstrated proficiency in statistics and microcomputer usage. Undergraduate or transfer credit will be evaluated on an individual basis.
 - d. At least six (6) hours of pre-approved, career-specific or elective courses taken from various departments and programs in the University.
 - e. Six (6) hours of thesis (ED 698).
 - f. At least three (3) hours of Internship (ED 691).
2. Successful completion of an oral and/or written comprehensive examination and oral defense of the thesis.

DEPARTMENT OF POLITICAL SCIENCE

Ronald G. Marquardt, Chair
Hattiesburg, MS 39406-5108
(601) 266-4310

MASTER'S DEGREE PROGRAM

Requirements for Regular Admission to the Master's Program:

1. Before beginning graduate level course work in Political Science, the student must have completed at least nine (9) hours of political science courses at the undergraduate level **and** earned at least a 3.0 average for all the political science courses he or she has taken at the undergraduate level.
2. Have a 2.75 grade point average for the last two years of the student's undergraduate studies.
3. Have scored at least 850 on **Graduate Record Examinations** for the composite mathematics and verbal sections with at least 400 on the verbal section.

Master of Arts

Requirements for the Master of Arts degree include thirty (30) semester hours of course work, including a thesis. A reading knowledge of one foreign language is also required.

Master of Science

Requirements for the Master of Science degree include: thirty-three (33) semester hours of course work, including an outside minor of nine (9) hours. A thesis is optional.

Master of Science with an Emphasis in Public Administration

Requirements for the Master of Science with an emphasis in Public Administration include: twenty-four (24) semester hours of course work in public administration and political science and a minor of nine (9) hours in an administrative area. A thesis is optional.

Course Requirements in the Major

Graduate students who expect to receive the Master of Arts degree will select three fields in Political Science in which to concentrate their course work. Graduate students who expect to receive the Master of Science degree will, in addition, select an outside minor, with the advice and consent of their committee.

The fields of Political Science and the courses in each field are:

Political Theory and Methodology

520, 521, 525, 720, 721

American Government and Politics

501, 502, 504, 506, 507, 508, 509, 700, 710

International Relations

531, 532, 535, 730, 731

Comparative Government and Politics

550, 551, 552, 556, 557, 558, 559, 750, 793

Public Administration

571, 572, 573, 574, 770

Public Law

580, 581, 582, 584, 585, 588, 589, 781

Comprehensive Examination

A written and oral comprehensive examination will be given at or near the end of the course work on the three fields of concentration and on the minor, if applicable.

Courses Accepted from Other Departments

The following courses will be accepted as political science for purposes of completing a major or minor if approved by the student's adviser.

ECO 501; HIS 512, 545, 546, 556

DEPARTMENT OF ENGLISH

David M. Wheeler, Chair
Hattiesburg, MS 39406-5037
(601) 266-4319

The Department of English offers programs leading to the Doctor of Philosophy, Master of Arts, Master of Science, and Specialist in English degrees. Within the framework of these degree programs, students may specialize in the traditional areas of English and American Literature, in Creative Writing, or Composition/Rhetoric.

General academic and admission requirements for all graduate degrees are set forth in another section of this **Bulletin** and general departmental requirements are listed below. Specific requirements for the various specializations, e.g., Creative Writing, etc., are described in information sheets available at the English Office, College Hall 210.

The Doctor of Philosophy

The Doctor of Philosophy degree offered by the Department of English is designed to prepare students for careers as scholars and teachers. This degree is taken after the candidate has earned a master's degree and meets all University and departmental admission requirements. All applicants must score a minimum of 1000 on the GRE Aptitude Test (verbal plus quantitative) and 500 on the Advanced Test in English. Other departmental requirements follow.

1. A minimum of fifty-four (54) semester hours beyond the master's degree including courses in bibliography and methods and literary criticism.
2. A qualifying examination after one full semester's work.
3. Proficiency in two foreign languages.
4. A written comprehensive examination.
5. Presentation and defense of dissertation.

Precise details of the doctoral program are available from the Department of English.

The Specialist in English

The Specialist in English degree offered by the Department of English is taken after earning a master's degree or its equivalent in English and is intended primarily for teaching careers in high schools and junior colleges. The Specialist in English degree currently meets the Mississippi State Department of Education requirements for AAA certification for those who already hold AA certification. All applicants must score a minimum of 950 on the GRE Aptitude Test (verbal plus quantitative). The GRE Advanced Test in English is recommended but not required.

Specific requirements include the following:

1. A minimum of thirty (30) semester hours of work beyond the master's degree.
2. One full-time semester of residence, all nine semester hours of course work being taken on the Hattiesburg Campus.
3. An acceptable written thesis and an oral defense of the thesis **or** the completion of a field-based problem.
4. ENG 640, Bibliography and Methods of Research in English, 3 hours; ENG 695, Advanced Methods in English, 3-9 hours; ENG 590, Composition Theory, 3 hours; ENG 798, Thesis, 3 hours (for thesis **or** a field-based problem).
5. At least nine (9) hours of course work must be taken in **one** of the following areas:
 - a. British Literature Before 1700.
 - b. British Literature Between 1700 and 1900.

- c. American Literature Before 1900.
- d. Literature of the Twentieth Century.
- e. Creative Writing.
- f. World Literature.
- g. Composition/Rhetoric
6. A maximum of nine (9) semester hours of course work may be taken in a related field outside the English Department. (Workshop and conferences credits may apply.)

The Master of Arts

All applicants for the Master of Arts degree must score a minimum of 850 on the GRE Aptitude Test (verbal plus quantitative). Requirements for the Master of Arts degree include the following:*

1. A minimum of thirty (30) semester hours of graduate credit including at least twelve (12) hours in an area of concentration such as English Literature, American Literature, Creative Writing, or Comparative Literature. A minimum of eighteen of the thirty hours must be taken at the 600-level or above with six in the area of concentration; however, English 714, 715, and 791 may not be used to satisfy this requirement.
2. ENG 506 (with approval, another linguistics course may be substituted) and ENG 640.
3. Foreign Language proficiency. (See the appropriate section of the **Bulletin**.)
4. Thesis (six hours credit).
5. An oral examination on the thesis and the related area of concentration.

* Candidates desiring AA certification must include, in addition, REF 601 and REF 607.

The Master of Science

All applicants for the Master of Science degree must score a minimum of 850 on the GRE Aptitude Test (verbal plus quantitative). Requirements for the Master of Science degree include the following:

1. A minimum of thirty (30) semester hours of graduate credit including at least eighteen (18) hours in English and American Literature with one course from at least five of the following categories: Old and Middle English Literature; Renaissance Literature; Restoration and Eighteenth-Century Literature; Nineteenth-Century Literature; Modern British and Modern Continental Literature; American Literature: Beginnings to 1900; and American Literature: 1900 to present. A minimum of eighteen of the thirty hours must be taken at the 600-level or above. ENG 714, 715, and 791 may not be included in these eighteen hours.
2. ENG 506 (with approval, another linguistics course may be substituted) and ENG 640.
3. An optional six (6) hours of electives in related fields outside the Department of English. (REF 601 and REF 607 must be taken if AA certification is desired.)
4. A comprehensive examination which may be either written or oral.

DEPARTMENT OF HISTORY

William K. Scarborough, Chair
Hattiesburg, MS 39406-5047
(601) 266-4333

The Department of History participates in programs leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy.

General Regulations:

The student is held responsible for following all graduate regulations. The student's major professor will help in any way possible, but the student is expected to know what is required and to take full responsibility. The procedure is explained fully in another part of this **Bulletin**.

MASTER'S PROGRAMS

Admission Requirements:

The department requires a combined score of 850 on the verbal-quantitative portions of the **GRE General Test** with a minimum score of 450 on the verbal section. See the **Academic Requirements** section of this **Bulletin** for other general requirements. In addition to the Graduate School criteria for regular admission, students whose native language is not English must also score at least 550 on the TOEFL Examination. The department presumes that applicants who have fulfilled these requirements possess an adequate knowledge of written and spoken English. If, upon their arrival at the University, it is determined that they do not possess an adequate command of English, the department reserves the right to require appropriate remedial courses.

Master of Arts

All students are expected to complete the following requirements:

1. A total of thirty (30) semester hours in history with eighteen (18) hours in courses numbered over 600.
2. HIS 710 at its first offering by the department.
3. HIS 740 recommended for all graduate students in American History.
4. A reading knowledge of one foreign language.
5. With the approval of the major professor the student may take a nine (9) hour minor within the minimum hourly requirements.
6. A thesis which will confer six (6) hours credit within the minimum hourly requirements.
7. After satisfactory completion of the course work and the thesis, the student will take a comprehensive oral examination.

Master of Science

All students are expected to complete the following requirements:

1. A total of thirty-three (33) semester hours with eighteen (18) hours of work in courses numbered above 600.
2. HIS 710 at its first offering by the department.
3. HIS 740 recommended for all graduate students in American History.
4. An outside minor of nine (9) hours within the minimum hourly total of thirty-three (33) semester hours is optional.
5. A thesis (optional).
6. After satisfactory completion of the course work, the student will take a comprehensive oral examination.

Master of Science for Secondary School Teachers

In addition to the general admission requirements, applicants must have a Class A teaching certificate in social studies. This program, designed specifically for secondary school teachers, meets the requirements for AA certification. In lieu of the regular MS requirements outlined above, students must complete the following requirements:

1. A total of thirty-three (33) semester hours with eighteen (18) hours of work in courses numbered above 600.
2. Twenty-four (24) hours in history which must include HIS 509, 558, 710, 740, and either 717 or 718.
3. An outside minor of nine (9) hours which must include REF 607, a course in world economic geography, and a political science course.
4. After satisfactory completion of the course work, the student will take a comprehensive oral examination.

Fields

The Department of History offers the following areas of concentration for the Master of Arts and Master of Science degrees:

I. United States History

II. European History

(This area may include Continental European History Since 1789, British History, and Modern Russian History)

III. Latin American History

All M.A. students and those M.S. students not seeking AA certification must, on the oral examination, demonstrate proficiency in one primary area of concentration and one secondary area. Two members of the examining committee will represent the primary area and one member will represent the secondary area. United States History and European History may be selected as either primary or secondary areas. Latin American History may be selected only as a secondary area. The nature and scope of the material to be included from each area will be determined by the student with the agreement of his/her graduate committee.

The M.A. student should successfully complete fifteen (15) hours of course work in the primary area and six (6) hours in the secondary area in addition to History 710 and the six hours of thesis work.

The M.A. thesis must be written in the primary area of concentration. A student may write a thesis in Latin American History if permission to do so is granted by the department.

The M.S. student not seeking AA certification should take twenty-one (21) hours of course work in the primary area and nine (9) hours in the secondary area in addition to History 710.

Students planning to pursue a doctoral degree must write a thesis and should enroll in the M.A. program.

Dual Master's in History and Library Science

In cooperation with the School of Library Science, the Department of History offers a combined program leading to two master's degrees: Master in Library Science and Master of Arts in History. Students will pursue both degrees simultaneously, and neither degree will be awarded until the entire program is completed. Students who withdraw from the Dual Master's program in favor of one of the two disciplines will be bound by the degree requirements of that discipline. The combined program includes thirty-three (33) hours in library science and twenty-four (24) hours in history for a total of fifty-seven (57) hours. Students in the combined program must complete the following requirements:

1. Thirty-three (33) hours in library science (consult the School of Library Science section of this **Bulletin** for specific course requirements).
2. Twenty-four (24) hours in history, at least fifteen (15) of which must be in courses at the 600 level or above.
3. HIS 710 at its first offering by the department.
4. One of the following seminars: HIS 712, 716, 749, or 780.
5. A reading knowledge of one foreign language.
6. A thesis which will confer six (6) hours credit within the minimum hourly requirements for the history component.
7. A comprehensive oral examination administered by a three-member committee representing both disciplines and given after satisfactory completion of the course work and thesis.

DOCTORAL PROGRAM

Admission Requirements

The department requires a minimum grade point average of 3.5 on all graduate work and a combined score of 1100 on the verbal-quantitative portion of the **GRE General Test**. Exceptions to these requirements may be made of those students who have received Master of Arts degrees from the University of Southern Mississippi, provided they receive a GRE score of 1000, a unanimous recommendation by their Master of Arts committees, and approval by a majority of the members of this department. Students so accepted will be classified "conditional," which status is removed by achieving a 3.5 average in twelve (12) hours work during the first two semesters.

A minimum of eighty-four (84) semester hours of course credit beyond the baccalaureate degree, which includes a minimum of three research seminars—two in the field of the major and one in the departmental minor—and HIS 710 and 740 must be taken by all students.

Major and Minor Requirements

The department offers the Doctor of Philosophy degree in U.S. History and in European History Since 1789. Candidates seeking a doctorate in U.S. History must demonstrate proficiency in all of American History. In addition, they must demonstrate proficiency in either European History 1789-1870 or European History Since 1870. Doctoral candidates in U.S. History must also demonstrate proficiency in one of the following fields: Medieval, Latin American, British History 1485-1760, British History Since 1760, one of the European fields not selected above, or a specialized field such as Russian History with the consent of the major professor and graduate committee. They are also required to develop an outside minor of twelve (12) semester hours in one of the social sciences or humanities.

Candidates seeking a doctorate in European History must major in the period of Europe Since 1789. They must demonstrate proficiency in either U.S. History to 1877 or U.S. History Since 1877. Doctoral candidates in European History are also required to demonstrate proficiency in one of the following fields: Medieval, Latin American, Britain 1485-1760, Britain Since 1760, one of the American fields not selected above, or a specialized field such as Russian History with the consent of the major professor and graduate committee. In addition, they must establish an outside minor of twelve (12) semester hours in one of the social sciences or humanities. Minor fields are selected after consultation with the candidate's major professor and graduate committee.

Language Requirement

Each prospective candidate for the doctoral degree must demonstrate proficiency in French and in German during his period of residence for the Doctor of Philosophy degree. Upon the recommendation of the major professor and the approval of the graduate committee, some other language may be substituted for either French or German. The first language must be completed before the start of the second year of graduate study, and the second language in the semester before the general comprehensive examinations are taken.

Doctoral Committee:

An information sheet regarding the appointment of a doctoral committee and doctoral examinations is available in the Department of History.

Dissertation

A dissertation is expected to be a mature and competent piece of writing, embodying the results of significant and original research on a subject chosen by the candidate and approved by the major professor and the graduate committee.

Upon completion and approval of the dissertation, the candidate is expected to stand satisfactorily a final examination on the dissertation and the field in which the dissertation lies.

DEPARTMENT OF PHILOSOPHY AND RELIGION

Forrest E. Wood, Chair
Hattiesburg, MS 39406-5015
(601) 266-4518

The Department of Philosophy and Religion offers a course of study leading to the Master of Arts degree with a major in Philosophy, and a graduate minor in either Philosophy or Philosophy and Religion.

MASTER'S DEGREE PROGRAM

In addition to the general admission and academic requirements for all graduate programs as set forth in this **Bulletin**, candidates for the Master of Arts degree with a major in Philosophy may choose either the research thesis option or the applied thesis option:

A. Research Thesis Option

1. A total of thirty (30) semester hours of credit, with at least eighteen (18) hours of that work in courses numbered 600 and above.
2. A research thesis, for which the student receives six (6) hours credit toward the thirty (30) total required hours.
3. A comprehensive examination, normally taken after the completion of all formal course work but before the thesis is officially begun. The comprehensive examination is intended to test the student's general competence in philosophy.
4. An oral examination on the completed thesis. During the oral examination, the student will be expected to be able to explain and defend the ideas presented in the thesis.
5. A reading knowledge of one foreign language.
6. Optional Minor: With the approval of the director of graduate studies, a student may have a minor (including religion), consisting of nine (9) semester hours in a (single) field which is related to the student's philosophical interests. Three (3) semester hours of that minor may then be counted toward the thirty (30) total required hours.

B. Applied Thesis Option

1. A total of thirty-three (33) semester hours of credit with at least eighteen (18) hours in courses numbered 600 and above.
2. An applied thesis which demonstrates the application of philosophical thought to a specific issue, problem or debate. The student will receive six (6) hours of credit for this applied thesis.
3. After satisfactory completion of the course work, the student must take a comprehensive examination.
4. An oral exam must be taken on the completed applied thesis.
5. A reading knowledge of one foreign language.
6. Optional Minor: With the approval of the director of graduate studies, a student may have a minor (including religion), consisting of nine (9) semester hours in a (single) field which is related to the student's philosophical interests. Three (3) semester hours of that minor may then be counted toward the thirty (30) total required hours.

For regular admission, the department requires a combined score of 850 on the verbal-quantitative portions of the **GRE General Test** with a minimum score of 450 on the verbal section. See the Academic Requirements of this **Bulletin** for other general requirements.

In addition to the Graduate School criteria for regular admission, students whose native language is not English must also score at least 550 on the TOEFL Examination. The department presumes that applicants who have fulfilled these requirements possess an adequate knowledge of written and spoken English. If, upon the student's arrival at the University, it is determined that he or she does not possess an adequate command of English, the department reserves the right to require appropriate remedial courses.

Students determined to have deficiencies in their undergraduate program will be required to remedy the deficiencies.

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

Robert L. Young, Chair
Hattiesburg, MS 39406-5074
(601) 266-4306

The Department of Sociology and Anthropology offers graduate work leading to the master's degree in anthropology and a minor in the master's and doctor's degree program of other departments.

MASTER'S PROGRAM IN ANTHROPOLOGY

The Department of Sociology and Anthropology offers programs within the College of Liberal Arts leading to the Master of Arts or Master of Science degree in Anthropology. The minimum combined **GRE** test score required for regular admission to the graduate program in Anthropology is 900. Also required is a minimum verbal score of 400. Requirements for these degrees are as follows:

Master of Arts

A minimum of thirty-three (33) semester hours, eighteen (18) of which must be earned at the 600 level or above; and completion of three of the four seminars in anthropology (ANT 621, 631, 641, 651) including the seminar in the student's sub-field of specialization. No more than six (6) hours of field methods courses (ANT 516, 536) and no more than nine (9) hours of independent study courses (ANT 692, 792) will be applied toward the degree. Also required are proficiency in one foreign language; successful completion of a comprehensive examination; and submission of an approved thesis. An outside minor of nine (9) hours in an approved related field may be included toward the total hours required.

Master of Science

A minimum of thirty-three (33) semester hours, eighteen (18) of which must be earned at the 600 level or above; and completion of three of the four seminars in anthropology (ANT 621, 631, 641, 651) including the seminar in the student's sub-field of specialization. No more than six (6) hours of field methods courses (ANT 516, 536) and no more than nine (9) hours of independent study courses (ANT 692, 792) will be applied toward the degree. Also required are proficiency in statistics; successful completion of a comprehensive examination; and submission of an approved thesis. An outside minor of nine (9) hours in an approved related field may be included toward the total hours required.

The Department of Sociology and Anthropology also offers a graduate minor in Anthropology for students in the master's and doctor's degree programs of other departments.

DEPARTMENT OF SPEECH AND HEARING SCIENCES

Stephen E. Oshrin, Chair
Hattiesburg, MS 39406-5092
(601) 266-5216

The Department of Speech and Hearing Sciences offers programs leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. At the master's level, emphasis is possible in three principal areas: (1) speech-language pathology, (2) audiology, and (3) education of the deaf. Doctoral students may specialize in one of three principal areas: (1) speech-language pathology, (2) audiology, and (3) speech sciences.

New students are accepted by the Department of Speech and Hearing Sciences for the master's program in Speech-Language Pathology, Audiology, or Education of the Deaf prior to each registration period. Students must have regular admission status to register for practicum courses.

There is a **Summer Only** Program which requires four summers for completion. Students must have the necessary undergraduate courses to be admitted to this program. Students may enter any summer. Courses are rotated in sequence so skipping a summer causes considerable delay.

MASTER'S PROGRAM

Potential graduate students should refer to other sections of the **Bulletin** for information regarding admission requirements as set forth by the Graduate School. Regular admission to the master's programs is based upon the previous academic records, scores on the **Graduate Record Examinations**, and recommendations. Minimum requirements for regular admission are a combined score of 850 on the aptitude phase of the GRE, a grade point average of 2.75 (where A equals 4.0) for the last two years of undergraduate study, and a grade point average of at least 3.0 on undergraduate courses in Speech and Hearing Sciences. A major in Speech and Hearing Sciences at the master's level requires a minimum of thirty-four (34) semester hours. The Master of Arts degree requires a thesis, three semester hours of clinical practicum, no less than eight three-semester hour courses, and the successful completion of a comprehensive examination. The master's comprehensive examination is the National Examination in Speech-Language Pathology and Audiology; the passing score for the 1990-91 academic year is 600. The Master of Science degree requires three semester hours of clinical practicum and no less than nine three-semester hour courses. A thesis is optional for the Master of Science degree.

Master's Degree with Emphasis in Audiology

The master's degree with an emphasis in audiology is a clinical degree designed to meet the academic and practicum requirements for the Certificate of Clinical Competence in Audiology awarded by the American Speech-Language-Hearing Association. The following courses are required: SHS 528, 601, 621, 623, 625, 696, 698 or 692, 701, 722, 723, 724, 726.

Master's Degree with Emphasis in Education of the Deaf

The program leading to the master's degree with an emphasis in education of the deaf is individualized to the needs of the student. Specialization in education of the deaf may be pursued in a number of areas including preprimary, elementary (grades 1-8), secondary, secondary special subject, or a specialty area. Selection of specialization areas is governed by the candidate's background, interests, and employment objectives.

The master's degree program enables a student to qualify academically for a master's degree teaching certificate. However, some states may impose other requirements prior to an individual's obtaining compensation at the master's level. Mississippi requires a teacher to have two years of experience before being compensated at the master's degree level; thus a person holding a master's degree but with no teaching experience must be paid at the bachelor's level until two years' experience has been obtained.

Requirements differ from state to state and it is the responsibility of the student to be aware of these differences.

Master's Degree with Emphasis in Speech-Language Pathology

The master's degree with emphasis in speech-language pathology is a clinical degree designed to meet the academic and practicum requirements for the Certificate of Clinical Competence in Speech-Language Pathology awarded by the American Speech-Language-Hearing Association. The following courses are to be taken by candidate's for the master's degree in this emphasis area: SHS 513, 516, 518, 519, 601, 694 or 695, 696, 702, 712, 716, 719.

A student in speech-language pathology must complete practicum in two different settings. Off-campus sites must be approved by the faculty adviser, and students must have a minimum grade point average of 3.0 before beginning off-campus practicum.

DOCTORAL PROGRAM

Potential doctoral students will be advised individually by the department faculty. Programs are devised in accordance with the applicant's background, interests, and professional objectives. Applicants for the Ph.D. program in Speech and Hearing Sciences are urged to become familiar with portions of the **Bulletin** which deal with admission, academic, and residency requirements. Regular admission requires a minimum grade point average of 3.50 (where A equals 4.0) on previous graduate courses and a test score of at least 1,000 on the aptitude phase of the **GRE**.

ACCREDITATION

The master's degree programs in Speech-Language Pathology and Audiology are accredited by the Educational Standards Board, and the USM Speech and Hearing Clinic is accredited by the Professional Standards Board. Both accreditations are by the American Speech-Language-Hearing Association, and are recognized by the Council on Post-Secondary Accreditation and the U.S. Office of Education.

The master's degree program with emphasis in Education of the Deaf is certified by the National Council for Accreditation of Teacher Education (NCATE). This certification is reciprocal among approximately 40 states.

ADMISSION REQUIREMENTS FOR INTERNATIONAL STUDENTS

In addition to meeting the requirements for admission stated in this **Bulletin**, international students are required to submit a TOEFL score of 560 and a total score of 850 on the verbal and quantitative portions of the **GRE**.

COLLEGE OF SCIENCE AND TECHNOLOGY

Graduate Degrees

1990-1991

School/Department	Major	Degree
Master's Level		
School of Engineering Technology	Manufacturing Technology	Master of Science
Biological Sciences	Biological Sciences	Master of Science
	Botany Emphasis	
	Environmental Biology Emphasis	
	Genetics Emphasis	
	Marine Biology Emphasis	
	Microbiology Emphasis	
	Molecular Biology Emphasis	
	Zoology Emphasis	
Chemistry and Biochemistry	Chemistry	Master of Science
	Chemistry Emphasis	
	Biochemistry Emphasis	
Computer Science and Statistics	Computer Science	Master of Science
	Statistics Emphasis	
	Teleprocessing Science	Master of Science
Geology	Geology	Master of Science
	Marine Science Emphasis	
Marine Science, Center of	Marine Science	Master of Science
	Biological Marine Science Emphasis	
	Chemical Marine Science Emphasis	
	Geological Marine Science Emphasis	
	Physical Marine Science Emphasis	
Mathematics	Mathematics	Master of Science
Medical Technology	Medical Technology	Master of Science
Physics and Astronomy	Physics	Master of Science
Polymer Science	Polymer Science	Master of Science
Science Education	Science Education	Master of Education
		Master of Science
	Biology Education Emphasis	
	Chemistry Education Emphasis	
	Earth Science Education Emphasis	
	Physics Education Emphasis	

Doctor's Level

Biological Sciences

Biological Sciences

Doctor of Philosophy

Botany Emphasis
 Environmental Biology Emphasis
 Genetics Emphasis
 Marine Biology Emphasis
 Microbiology Emphasis
 Molecular Biology Emphasis
 Zoology Emphasis

Chemistry and Biochemistry

Chemistry

Doctor of Philosophy

Chemistry Emphasis
 Biochemistry Emphasis

Marine Science

Marine Science

Doctor of Philosophy

Polymer Science

Polymer Science

Doctor of Philosophy

Science Education

Science Education

Doctor of Education

Doctor of Philosophy

Biology Education Emphasis
 Chemistry Education Emphasis
 Earth Science Education Emphasis
 Physics Education Emphasis

COLLEGE OF SCIENCE AND TECHNOLOGY

Stephen A. Doblin, Acting Dean
C. Howard Heiden, Associate Dean
Hattiesburg, MS 39406-5165
(601) 266-4883

The College of Science and Technology offers degrees as outlined on the previous pages. Please check each departmental section for areas of specialization.

The Departments of Biological Sciences, Geology, Mathematics, and Science Education in cooperation with the College of Education and Psychology offer programs leading to the Master of Education degree.

The Doctor of Education degree is offered in cooperation with the College of Education and Psychology by the Department of Science Education.

Environmental Science courses are so constructed as to provide a minor for a master's or doctoral degree program.

The programs of Architectural Engineering Technology, Construction Engineering Technology, Electronics Engineering Technology, Industrial Engineering Technology, and Mechanical Engineering Technology offer selected service courses at the graduate level. Course descriptions can be found elsewhere in this **Bulletin**.

For detailed information concerning a department's specified degree program please refer to that department in the following pages. The student's attention is also directed to another part of this **Bulletin** for general Graduate School requirements and regulations.

SCHOOL OF ENGINEERING TECHNOLOGY

R. A. Cade, Interim Director
Hattiesburg, MS 39406-5137
(601) 266-4895/4896

MASTER OF SCIENCE IN MANUFACTURING TECHNOLOGY

S. Kant Vajpayee, Program Coordinator

The School of Engineering Technology offers a program leading to the Master of Science degree in manufacturing technology. A minimum of thirty-three (33) graduate hours is required for the degree. Courses are offered in computer-aided design and manufacturing (CAD/CAM), quality assurance, computer integrated manufacturing (CIM), manufacturing resources planning, and in related areas that provide a balance between technology and management of manufacturing industries. For course details refer to Course Descriptions section under Manufacturing Technology. The program prepares students for leadership roles in high-technology manufacturing.

Admission Requirements

Prospective candidates must have at least a bachelor's degree in a discipline that can be closely identified with manufacturing. This includes most branches of engineering and engineering technology, and some physical sciences including computer science. Since manufacturing is multi-disciplinary, entrance requirements are flexible; however, applicants must have undergraduate preparation in calculus, statistics, machine shop practice, and programming skills in FORTRAN or BASIC. Those deficient in these areas may be admitted conditionally and required to complete undergraduate prerequisites.

The other requirements for admission are a score of 950 on the aptitude section of the **Graduate Record Examinations (GRE)** and a grade point of at least 2.75 (on a

scale of 4) for undergraduate work. Candidates not meeting these requirements may be admitted conditionally.

Academic Progression

Of the thirty-three (33) credit-hours required for graduation, twenty-one (21) credit hours must be MFG 610, 630, 640, 641, 660, and 698. The other twelve (12) credit hours must be selected from a list of electives approved by the Program Coordinator. Some of the elective courses are: INT 505, 580; MET 520; MFG 620, 650, 670L, 680, 691, 692, 693, and 697.

During the second semester of study, each student is assigned a three-member committee of the graduate faculty. The committee facilitates selection of a thesis topic and works with the Program Coordinator to direct the remainder of the student's study around this thesis topic.

Satisfactory performance in the comprehensive examination, normally taken during the final semester, is required for graduation. Furthermore, a student must maintain a grade of B or better in all 600-level courses taken and a cumulative GPA of 3.0 based on all courses completed.

DEPARTMENT OF BIOLOGICAL SCIENCES

Billy J. Martin, Chair

Fred G. Howell, Assistant Chair and Graduate Coordinator

Hattiesburg, MS 39406-5018

(601) 266-4748

The Department of Biological Sciences offers graduate degrees with emphases in botany, environmental biology, genetics, marine biology, microbiology, molecular biology, and zoology. Students may take courses taught at the Gulf Coast Research Laboratory (GCRL) at Ocean Springs, MS. GCRL faculty may function as the student's major professor.

Regular admission to the **Master's Degree Program** requires a score of at least 1000 on the aptitude section (verbal plus quantitative) of the **Graduate Record Examinations** and a grade point average of 3.0 or higher on undergraduate work in biological and physical science courses. Regular admission to the **Doctoral Program** requires a score of at least 1000 on the aptitude section of the **Graduate Record Examinations**, and a grade point average of 3.5 or more on all previous graduate work.

MASTER'S DEGREE PROGRAM

A minimum of thirty (30) graduate hours is required for this degree. Students must meet the general requirements set forth by the Graduate School of the University of Southern Mississippi. The following are major additional requirements:

- (1) Complete interviews with the Biological Sciences faculty by the end of the first semester.
- (2) Arrange for a major professor or temporary faculty sponsor by the end of the second semester.
- (3) Establish a three-member graduate thesis committee once a major professor and research area are chosen.
- (4) Submit a research prospectus approved by the graduate thesis committee.
- (5) Pass a written and/or oral comprehensive examination.
- (6) Present an acceptable copy of a thesis to the graduate thesis committee ten days prior to a public defense of the thesis at a research seminar presented at an advertised meeting.

DOCTORAL PROGRAMS

A minimum of eighty-four (84) graduate hours beyond the bachelor's degree or a minimum of fifty-four (54) graduate hours beyond the master's degree is required. Students must meet the general requirements set forth by the Graduate School of The University of Southern Mississippi. The following are major additional requirements:

- (1) Arrange for a major professor or temporary faculty sponsor by the end of the second semester.
- (2) Establish a five-member doctoral committee by the beginning of the third semester.
- (3) The doctoral committee will consider the student's academic record and interview the student at a committee meeting to assess the student's ability to pursue additional graduate work by the end of the third semester of enrollment. This assessment fulfills the requirement for a qualifying examination as determined by the Graduate Council of the University as stated in this **Bulletin**.
- (4) Establish a program of study by the end of the fourth semester of enrollment in the doctoral program.
- (5) Pass a comprehensive examination consisting of written and oral sections that is administered by the doctoral committee. The comprehensive examinations should be taken by the end of the third year (sixth semester) of enrollment in the doctoral program.
- (6) Submit a formal prospectus (research proposal) that has been approved by the doctoral committee.
- (7) Present an acceptable copy of the dissertation to the doctoral committee ten days prior to a public defense of the dissertation at a research seminar presented at an advertised meeting.

INSTITUTE OF GENETICS

The Institute of Genetics participates in programs through the Department of Biological Sciences leading to the Master of Science degree or the Doctor of Philosophy degree with an emphasis in genetics. Requirements for these degrees are outlined under the Department of Biological Sciences.

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

David Creed, Chair
Hattiesburg, MS 39406-5043
(601) 266-4701

MASTER OF SCIENCE DEGREE PROGRAM

The Department of Chemistry and Biochemistry offers the Master of Science degree with specialization in analytical, inorganic, organic, physical, and/or biochemistry as well as an interdisciplinary emphasis in biochemistry. The M.S. programs jointly emphasize area course work and research/thesis and require a minimum of thirty (30) hours.

Placement examinations to identify deficiencies and to indicate remedial studies to remedy these deficiencies, participation in the seminar program, and a familiarity with computer programming are required for the M.S. degrees, along with specific but flexible coursework programs. Completion of a master's comprehensive examination in the student's area of specialization and a one-semester residency period after completion of the comprehensive are required in each program.

DOCTOR OF PHILOSOPHY DEGREE PROGRAM

The Department of Chemistry and Biochemistry offers the Doctor of Philosophy degree with specialization in analytical, inorganic, organic, physical, and/or biochemistry as well as an interdisciplinary emphasis in biochemistry. The Ph.D. programs emphasize excellence in research. Qualified students holding a bachelor of science with a major in chemistry are encouraged to enter directly into the doctoral program. Individuals who are adequately prepared may take the qualifying examination at the beginning of their first semester of graduate work, but in no case can it be postponed beyond the second semester of graduate work.

The Ph.D. programs require eighty-four (84) graduate hours beyond the bachelor's degree or fifty-four (54) graduate hours beyond the master's degree. Specific course requirements depend upon individual needs and are selected with the advice of the student's research director and doctoral committee.

Among other requirements are:

- (1) Completion of the Ph.D. Comprehensive Examination in the student's area of specialization;
- (2) Participation in the seminar program;
- (3) a. Proficiency in two of the following three languages: French, German and Russian, **or**
 b. Proficiency in one of the three languages listed above and computer proficiency, **or**
 c. Proficiency in one of the three languages listed above and a nine-hour minor of courses outside the department, the hours for which do not apply towards the degree.
- (4) A suitable research problem; and
- (5) Completion of the dissertation and its successful defense.

DEPARTMENT OF COMPUTER SCIENCE AND STATISTICS

James E. Miller, Chair
Hattiesburg, MS 39406-5106
(601) 266-4949

The Department of Computer Science and Statistics offers the Master of Science degree in Computer Science. For the degree, a minimum of 33 hours of graduate work is required. Of these hours at least 21 must be computer science courses (non-thesis/project) numbered 600 or above. In addition a student will complete either a thesis (6 hours) or a project (3 hours) in computer science.

The masters program is designed to provide a fundamental understanding of theoretical and applied computer science which will allow the student to begin exploring special topics and state-of-the-art subjects. It will ready a student for advanced applications, development, and research positions in industry or for doctoral level studies.

In addition to meeting the entrance requirements set forth by the Graduate School of the University of Southern Mississippi, requirements for regular admission include an undergraduate GPA of at least 2.75/4.0 and a Graduate Record Examinations Score in excess of 1000 (verbal plus quantitative). Conditional admission may be granted to students with an undergraduate GPA between 2.5 and 2.75 provided they attain a score of at least 1000 on the GRE. Conditional admission may be granted to students with a GRE score less than 1000 provided they have an undergraduate GPA of 3.50 or higher.

Students not meeting the minimum requirements for regular admission are encouraged to submit additional information which documents their potential for doing graduate work in computer science. This would include industrial work experience and training and graduate work already completed. Students may submit GRE scores no more than twice.

A student applying for admission will normally have a B.S. degree from a computer science or closely-related program. Minimum coursework required for admission includes the equivalent of CSC 101, 102, 203, 204, 205, 306, 307, 308 and any three out of courses CSC 309 through CSC 415, CSC 616, MAT 560, MAT 561 (see the USM Undergraduate and Graduate Bulletins for course descriptions) and mathematics through integral calculus, basic probability, discrete math, and linear algebra.

Conditional or regular admission to the computer science master's program will be recommended, as appropriate, by the computer science graduate admissions committee.

For students who do not come from an undergraduate program where the courses clearly equate with the USM courses, the computer science graduate admissions committee will review a student's transcript and decide what, if any, deficiencies can be met with leveling courses and/or undergraduate CSC/MATH courses.

A student will not be granted regular admission to the computer science graduate program until those deficiencies are met. See the general policies of the Graduate School for further requirements of conditional admission for students.

Credit will NOT be given toward the master's degree for any course taken to meet deficiencies, admission requirements, or for undergraduate prerequisite courses.

Before completion of two semesters of graduate work, the student must select a three-person advisory committee. The chair of this committee must be from the Department of Computer Science and Statistics. He/she will be the student's academic adviser and will help the student outline a tentative graduate program (one member may be from outside the Department of Computer Science and Statistics).

The course of study consists of:

(1) Completion of prerequisites.

(2) Completion of 33 hours of graduate course work where 15 hours are selected from the 8 course core of CSC 616, 620, 623, 624, 626, 629, 632 and 633. The remainder of classwork must come from a combination of non-selected core courses, Computer Science elective courses, Computer Science related graduate level courses from other departments (with approval of student's graduate committee) and a thesis or project.

(3) Satisfactory completion of a thesis (6 hours credit) or a project (3 hours credit).

(4) Satisfactory completion of a final comprehensive examination.

DEPARTMENT OF GEOLOGY

David M. Patrick, Chair
Hattiesburg, MS 39406-5044
(601) 266-4526

The Department of Geology participates in programs leading to the Master of Science degree in Geology. A minimum of thirty (30) graduate hours is required, eighteen (18) of which must be in courses numbered 600 or above. For the Master of Science degree, the student must complete an original research program, submit and defend a thesis to the department; a thesis committee which supervises these activities is established when the student is formally admitted to a degree candidacy. The **GRE** advanced test in geology is desirable but is not a requirement for admission. No student will be admitted as a regular graduate student for the master's degree in Geology who has a score of less than 1000 on the combined total of Aptitude Section of the **Graduate Record Examinations**, but may be considered for either conditional or non-degree graduate status as outlined in an earlier section.

Students following programs leading to the Master of Science degree in Geology will be required to take a summer field course if they did not have such a course as undergraduates (this stipulation may be waived, upon application, on account of physical disability).

The department in cooperation with the Center for Marine Science offers an interdisciplinary emphasis area in marine geology which includes courses in biological, chemical, and physical marine science taught on the Hattiesburg campus and at SSC.

CENTER FOR MARINE SCIENCE

G.A. Knauer, Director
John C. Stennis Space Center
Stennis Space Center, MS 39529
(601) 688-3177

The Center for Marine Science is located at the John C. Stennis Space Center (SSC) on the Mississippi Gulf Coast near Bay St. Louis, MS. Graduate level education and research programs are offered in the four core areas of marine science (biological, chem-

ical, geological, and physical marine science). The Center is composed of regular faculty drawn from the Department of Marine Science and the Gulf Coast Research Laboratory and also cooperates with other departments in the College of Science and Technology and scientists affiliated with NOARL, NOAA, and other agencies at SSC to provide state-of-the-art research and educational opportunities in marine science.

The Center is primarily an interdisciplinary graduate research program. The Center also offers a selected number of undergraduate courses in the four subdiscipline areas of biological, chemical, geological and physical marine science. Most of the Center's undergraduate courses are taught during the summer semester at the Gulf Coast Research Laboratory campus. MAR 151 (a general curriculum natural science laboratory elective) is offered on the main campus in Hattiesburg.

The best preparation for students interested in pursuing graduate work in marine science would be to develop a strong working knowledge in calculus, applied mathematics, statistics, the basic sciences (biology, chemistry, geology, physics) and engineering. Some experience with computers is also highly recommended. We realize that not all students will have gained the ideal background for pursuing a M.S. or Ph.D. in marine science. Deficiencies will normally be made up during the student's first year.

MASTER'S DEGREE PROGRAM

Admission Requirements

Regular admission to the Master's program in Marine Science requires a baccalaureate degree from an accredited institution, a minimum score of 1000 on the Graduate Record Examinations (verbal plus quantitative) and a minimum grade point average of 3.0 for the last two years of undergraduate study.

Requirements for Graduation

A total of 34 hours of graduate level courses with a minimum GPA of 3.0 must be completed in order to fulfill the Master of Science degree requirements. All entering graduate students must complete the four core courses generally by the end of their first year in residence. A grade of B or better must be obtained in all core courses in addition to passing the department qualifying examination, in order for the student to proceed to candidacy. A graduate student can accumulate no more than two C's. Other program course requirements include six (6) hours of Thesis and at least one (1) hour of Seminar in Marine Science. The required courses account for 23 of the total 34 hours; the remaining 11 hours (courses numbered 600 and above) must be chosen by the student from a list of elective courses approved by the department. More information on degree requirements and additional course listings can be obtained by writing to the Director.

Required Courses:

	Hours
MAR 501 Biological Marine Science.....	3
MAR 501L Biological Marine Science Laboratory	1
MAR 541 Chemical Marine Science.....	3
MAR 541L Chemical Marine Science Laboratory	1
MAR 561 Physical Marine Science	3
MAR 561L Physical Marine Science Laboratory	1
MAR 581 Geological Marine Science	3
MAR 581L Geological Marine Science Laboratory	1
MAR 689 Seminar in Marine Science.....	1
MAR 698 Thesis	6
Approved Electives.....	11

DOCTOR OF PHILOSOPHY DEGREE PROGRAM

The Center for Marine Science offers a Doctor of Philosophy in Marine Science with specialization in a wide range of marine science fields, including biological, geological and physical oceanography and marine chemistry. Other areas of specialization are avail-

able through the Center's association with researchers at the Gulf Coast Research Laboratory (GCRL). The Ph.D. program emphasizes excellence in research. Qualified students holding either a bachelor's or master's degree in a relevant field of science, mathematics or computer science are encouraged to apply for admission to the Ph.D. program.

Students must meet the general requirements set forth in the **Graduate Bulletin** of The University of Southern Mississippi. The Ph.D. in Marine Science requires eighty-four (84) graduate hours beyond the bachelor's degree or fifty-four (54) graduate hours beyond the master's degree.

Admission Requirements

Regular admission into the Ph.D. program in Marine Science requires a bachelor's degree from an accredited institution, a minimum score of 1000 on the **Graduate Record Examinations** (verbal plus quantitative), a minimum 3.0 GPA for the last two years of undergraduate study, and a minimum 3.5 GPA for all previous graduate work. A minimum score of 550 is required on the Test of English as a Foreign Language (TOEFL) for applicants whose native language is other than English.

Program Requirements

Required Courses:		Hours
MAR 501	Biological Marine Science	3
MAR 501L	Biological Marine Science Laboratory.....	1
MAR 541	Chemical Marine Science	3
MAR 541L	Chemical Marine Science Laboratory.....	1
MAR 561	Physical Marine Science	3
MAR 561L	Physical Marine Science Laboratory	1
MAR 581	Geological Marine Science	3
MAR 581L	Geological Marine Science Laboratory	1
MAR 689	Seminar in Marine Science	2
MAR 898	Dissertation in Marine Science.....	12
Approved Elective courses.....		12*

*MAR 691, MAR 791 - Directed Research in Marine Science, MAR 697, MAR 797 - Independent Study and Research, MAR 698 - Thesis in Marine Science, and MAR 898 - Dissertation in Marine Science, do not count toward this twelve (12) credit hour approved elective requirement.

The above courses account for forty-two (42) of the total fifty-four (54) hours (students entering with a master's degree) or eighty-four (84) hours (students entering with a bachelor's degree) required for the Ph.D. Additional course listings can be obtained by writing to the Director.

Other Program Requirements:

- (1) The student is required to pass an oral and/or written qualifying examination which is administered after successful completion of the four (4) core courses.
- (2) The Ph.D. program requires (a) proficiency in two of the following languages: French, German, Russian or Spanish, **or** (b) proficiency in one language and in statistics or computer science, **or** (c) proficiency in one language and a nine (9) hour minor, the hours for which do not apply toward the degree.
- (3) Selection and approval of a suitable research problem.
- (4) The student is required to pass an oral and/or written comprehensive examination to determine the student's comprehension of course material and the student's ability to pursue the proposed research.
- (5) Completion and successful defense of a scholarly dissertation based on the student's original research.

DEPARTMENT OF MATHEMATICS

Wallace Pye, Acting Chair
Hattiesburg, MS 39406-5045
(601) 266-4289

The Department of Mathematics offers programs leading to the Master of Science degree with a major in mathematics. For the degree, a minimum of thirty-three (33) semester hours of graduate work is required, twenty-one (21) of which must be in courses numbered above 600. The course MAT 691, Research in Mathematics, will neither satisfy any of the 600 level course requirements nor count towards the thirty-three (33) hour minimum requirement. At least eighteen (18) hours of the courses numbered above 600 must be in mathematics. A student who is in residence for fewer than two semesters must complete a minimum of twenty-one (21) semester hours of mathematics courses numbered above 600. Subject to the approval of the Chair of the Department of Mathematics and the student's advisory committee, an outside minor (e.g., computer science, physics, business, secondary education) consisting of nine (9) semester hours may be used as a portion of the thirty-three hour requirement.

Before completing one semester of graduate work, the student should select a three-person advisory committee from among the faculty of the Department of Mathematics. The chair of this committee, who will be the student's academic adviser, will help the student outline a tentative graduate program. All courses offered by the department are grouped into seven areas: topology; analysis; algebra and linear algebra; optimization and numerical analysis; real analysis and probability; combinatorics and graph theory; and applied analysis. In designing the degree program, the student should select a suitable balance in at least three of these seven areas. Descriptions of the courses which are included in each area may be obtained in the departmental office. The members of the advisory committee must approve all additions and deletions to the student's program, will schedule, organize, and administer the comprehensive examinations and, in consultation with the student, will determine whether a thesis will be written.

The master's thesis, the writing of which is optional with the student's advisory committee, must conform to departmental and University regulations. The student whose prospectus is approved by the advisory committee may select only two areas of specialization (other than the one in which the thesis is written). The written comprehensive examination will cover the content of all courses taken in these two areas. The oral examination will consist primarily of a defense of the thesis (See item 3 below). Four copies of the thesis are required and must be distributed as follows: two copies to the Dean of the Graduate School; one copy to the Chair of the Department of Mathematics; and one copy to the student's major professor (who will be the academic adviser).

Additional degree requirements include successful completion of:

(1) the graduate seminar during the first two semesters the student is in residence. A maximum of six (6) semester hours of credit may be earned for participation in the seminar;

(2) the first two courses of the advanced calculus sequence, neither of which may be included as part of the thirty-three (33) hour minimum requirement. It is recommended that any student who intends to pursue graduate study in mathematics include these courses in the undergraduate program. When this is not the case, they must be completed at the beginning of the graduate program. A grade of at least C must be earned in each of the two courses;

(3) MAT 543, Advanced Calculus III, during the first semester in residence or immediately following the completion of the first two courses in the advanced calculus sequence;

(4) oral and written comprehensive examinations no later than the last week of the last semester in residence.

In order to obtain regular admission to the master's program in Mathematics, a student should

(1) satisfy the present undergraduate requirements for a major in Mathematics at the University of Southern Mississippi;

(2) have a grade point average of at least 3.0 on all undergraduate mathematics courses and a grade point average of at least 2.75 for the last two years of undergraduate study ($A = 4.0$);

(3) have a combined score of at least 1000 on the verbal and quantitative portions of the **GRE General Test**.

(4) have sent three (3) letters of recommendation, a current resumé, and a copy of all undergraduate transcripts to: Chair, Department of Mathematics, at the address given at the beginning of this section. This is **required** of all applicants for a graduate teaching assistantship.

(5) earn a score of at least 525 on the TOEFL Examination, if he or she is an international student.

Additional requirements of the Graduate School for regular admission, as well as the criteria for conditional admission, are outlined in an earlier section of this **Bulletin**. Students admitted on a conditional basis may be required to complete coursework in addition to the minimum 33-hour requirement. It should be emphasized that admission to the Graduate School does not imply acceptance of the student as a candidate for a graduate degree in Mathematics. For additional information on the master's program in Mathematics, the student should consult "Instructions for Establishing a Master's Degree Program in Mathematics", "The Master's Thesis: Guidelines for the Writing of the Prospectus", "Graduate School Policies for Preparing Theses and Dissertations," and "Procedures Governing the Written and Oral Examinations for the M.S. Degree in Mathematics." Copies of all these documents are available in the departmental office.

In the summer of 1983, the department developed its Mathematics Refresher and Enrichment Program (M-REP), consisting of six courses. None of these courses will count toward any mathematics degree, but they do carry academic credit. These are sometimes offered in non-traditional modes such as at night, on weekends, during late afternoon, as accelerated courses (i.e., half-semester), and with varying semester hour credit. Some are scheduled in conjunction with science courses in which mathematics is used as a tool. They are designed to provide basic understanding of mathematical skills and thought for those interested in obtaining certification to teach mathematics, as well as to be a relevant refresher for those who already possess Class A certification in secondary mathematics. Individual course descriptions follow the descriptions of the 600 level mathematics courses.

DEPARTMENT OF MEDICAL TECHNOLOGY

M. Jane Hudson, Chair
Hattiesburg, MS 39406-5134
(601) 266-4908

Admission Requirements

The applicant must hold a baccalaureate degree from an accredited college or university and possess certification as a medical technologist by a recognized national certifying agency. The faculty recommends that an applicant have laboratory working experience as a medical technologist before entering a master's degree program. In addition to meeting the general requirements of the Graduate School and University as stated in this **BULLETIN**, the applicant must present a total score of 850 on the verbal and quantitative sections of the **GRE**. Regardless of previous college experience, if English is not the native language of any student, evidence of English proficiency must be provided prior to admission into the graduate program. The MTELP (Michigan Test of English Language

Proficiency) requirement is "Proficiency II" and is preferred by the department. Alternately, a TOEFL of 550 may be accepted.

The Master of Science in Medical Technology degree program seeks to provide skills and knowledge to certified medical technologists which will enhance upward mobility in the profession. Graduates of the program are candidates for positions as laboratory supervisors or managers, education coordinators, college or university medical technology faculty members, laboratory computer specialists, research laboratory technologists and blood bank coordinators. The program is structured to provide the student with an area of specialization or expertise.

The department has an alternate program for individuals who are not certified medical technologists, but hold a baccalaureate degree in a related basic science field, such as biological science or chemistry. This track permits the student to complete a residency required for a certificate in medical technology during the graduate program. Certification as a medical technologist must be obtained prior to completion of the M.S. degree and residency hours do not apply toward the required 30 semester hours of course work.

A minimum of thirty (30) semester hours of course work, excluding hours awarded for thesis, is required for the master's degree in Medical Technology. A minimum of eighteen (18) semester hours must be in courses numbered 600 or above. Students are required to take a science core curriculum which is composed of courses in several science areas encompassed by medical technology. These core courses should interrelate and be directed toward one major interest. The remainder of the required course work may be in an area of specialization such as microbiology, chemistry, genetics, immunology, computer science, management, or education. All course work taken for credit toward the M.S. degree in Medical Technology must have been approved by the student's graduate committee. Students are required to write a thesis under the direction of a Medical Technology department faculty member and on a subject approved by the student's graduate committee. During the initial phase of study the student will also be required to complete a special problem of his or her own design. Curriculum and problem must be approved by the student's graduate committee which is composed of a chair and two members recommended by the department chair and appointed by the Graduate Dean.

Courses

- I. Science Core: With graduate committee approval, select 15-16 hours from the following.
 BIOLOGICAL SCIENCES: BSC 512, 512L, 554, 560, 561, 561L, 562, 562L, 564, 564L, 575, 577, 577L, 581, 581L, 582, 582L, 583, 583L, 584, 584L, 585, 585L, 586, 586L, 587, 587L, 760, 770, 780, 780L, 789.
 CHEMISTRY: CHE 521, 522, 527L, 528L, 541, 621, 701, 721, 723, 725 or 726
 TOXICOLOGY: TOX 570
 ENVIRONMENTAL TECHNOLOGY: ESC 501, 501L, 502, 502L, 531, 31L
 FORENSIC SCIENCE: FSC 530, 540, 542
- II. **Area of Specialization:** Complete 15 additional hours of courses in chosen area such as education, management, chemistry, microbiology, genetics, immunology, or computer science. This curriculum must be approved by the student's graduate committee.
- III. **Comprehensive Examinations:** Final comprehensive examinations are required by the department. These will include both oral and written examinations and must be completed during the final semester of study.
- IV. An oral defense of the master's thesis will be required.

DEPARTMENT OF PHYSICS

Grayson H. Rayborn, Chair
 Hattiesburg, MS 39406-5046
 (601) 266-4934

The Department of Physics offers a program leading to the Master of Science degree with a major in Physics. The curriculum is designed to provide students with knowledge in both the fundamental areas of physics as well as selected applied physics topics.

Research areas from which a thesis may be chosen include Emission Spectroscopy, Digital Signal Processing, Acoustics, Viscous Fluid Flow, Turbulence/Chaos, Polymer Physics, Mathematical Physics, Statistical Mechanics, Many-Body Methods in Nuclear and Condensed Matter, and General Quantum Field Theory.

Admission Requirements

Admission to the Master of Science Program is based upon a student's previous academic performance and scores on the **Graduate Record Examination (GRE)** and the score on the **TOEFL** examination for international students. Prospective graduate students should have completed mathematics through differential equations, and satisfactorily completed courses in introductory physics, mechanics, electricity and magnetism, modern physics and quantum mechanics at the undergraduate level. Students with inadequate preparation may be admitted but will be required to complete make-up courses with a grade of B or better. A combined score on the **GRE** aptitude sections (Verbal plus Quantitative) of 1000 is required for admission to the program. Students scoring less than 1000 may be admitted on a conditional or non-degree status only. It is recommended, but not required, that students applying for a stipend take the Advanced Physics GRE. For international students a score of 540 on the **TOEFL** is required.

Course Work and Degree Requirements

Requirements for graduation include:

1. Completion of a minimum of thirty (30) hours of graduate work.
2. Completion of the Physics Core courses.
3. Development and completion of an original research project, thesis and oral defense.
4. Satisfactory completion of a Comprehensive Examination.

Required Physics Core:

- | | |
|-----------------------------|----------|
| 1. PHY 601, 602, 603, 650 | 15 hours |
| 2. PHY 689: Physics Seminar | 4 hours |
| 3. PHY 698: Thesis | 6 hours |

Polymer Physics Option:

Students choosing this optional program to the M.S. in Physics must have successfully completed at least one full year of General Chemistry with Laboratory and it is strongly recommended that one semester of Organic Chemistry be taken for credit. Attendance at relevant seminars in the Department of Polymer Science is required.

- | | |
|---|----------|
| 1. Physics Core for Polymer Option:
PHY 601, 602, 603, 650, 689 | 15 hours |
| 2. Polymer Science: (at least 9 hours from the following)
PSC 710, 711, 712, 730, 811, 812 | 9+ hours |
| 3. PHY 698: Thesis (in the area of Polymer Science) | 6 hours |

DEPARTMENT OF POLYMER SCIENCE

Roger D. Hester, Chair
Hattiesburg, MS 39406-0076
(601) 266-4868

The Department of Polymer Science offers programs at the master's and doctoral levels. Curricula are designed to provide both a fundamental understanding of polymer chemistry and engineering and advanced courses dealing with special topics and state-of-the-art subjects. Both the M.S. and Ph.D. degrees require extensive research in areas involving basic investigations and developments applied to current and future problems of our society and world.

MASTER'S DEGREE PROGRAM

Admission Requirements

Admission to the master's program is based upon previous academic performance and scores on the aptitude section of the **Graduate Record Examinations**. A minimum grade point average of 2.75 or better on the last 60 hours of undergraduate work and GRE scores on the Verbal (V) and Quantitative (Q) are required to satisfy the following formula:

$$V + Q > 1050$$

Requirements for Graduation

Graduation is based upon:

1. Completion of 30 hours of graduate work including the 21 hours of PSC core courses with a GPA of 3.0 or better.
2. Satisfactory development of an original research project and a thesis.
3. Satisfactory completion of the final comprehensive examination.

Required Courses

Hours

PSC 701, 702, 703 or 712, 710, 711, 720, 721, 730.....	21
PSC 691, 698: Research in Polymer Science and Thesis.....	10-15
PSC 789: Polymer Science Seminar.....	2-4

DOCTOR OF PHILOSOPHY

The department offers the Ph.D. degree in Polymer Science. Minimum course requirements for the doctorate are seventy-eight (78) semester hours not including research tools and dissertation. Forty-eight (48) semester hours are required beyond a master's degree in Polymer Science or a related area. Doctoral students must take all core courses (PSC 701, 702, 703, 710, 711, 712, 720, 721, 730, 740) as well as one-half of the PSC 800-level courses that are offered. Graduate students must register for the polymer science seminar (PSC 789) each semester that they are in residence.

Admissions Requirements

The department usually admits students only to the master's program because of the diversity of entering students' backgrounds. Demonstrated excellence is required in coursework and examinations before a student is allowed to enter the doctoral program. Admission of students with previous graduate coursework or master's degrees from other institutions will be considered on an individual basis.

Admission Requirements for Advanced Study

Regular admission requires (1) obtaining a minimum GPA of 3.0 on the 26 hours of core courses; (2) obtaining a minimum GPA of 3.5 in at least 30 hours of graduate courses taken at USM including the core courses and research; and (3) passing all three sections of the written comprehensive examination. There is no option for conditional admission for advanced study.

Qualifying Examination

This examination is taken during the first week prior to the student's first semester of graduate work. It requires a minimum proficiency in organic and physical chemistry.

Comprehensive Examination

The written comprehensive examination is given once a year at the beginning of the summer quarter. This three-part examination covers the areas of organic, physical, and practical polymer science. A student who fails any part of the examination must retake and pass that part the following year. Only one additional attempt is allowed.

Dissertation Prospectus

Within 9 months of completing the written comprehensive examination, a written dissertation prospectus which includes an annotated bibliography must be approved by the student's committee. The prospectus summarizes the student's work accomplished to date and gives an outline of research objectives for the dissertation project.

Proposition Presentation and Oral Defense

Within 18 months of completing the comprehensive examination, the student must submit an independently conceived and developed written proposal dealing with an original proposition unrelated to his or her dissertation research. This proposal is then presented orally and defended before the faculty. Oral evaluation of the student's general knowledge of polymer science is carried out concomitant with his or her defense of the proposal.

Additional requirements for the Ph.D. degree dealing with residency, the research tools, the committee, and application for candidacy and graduation are described elsewhere in this **Bulletin**.

DEPARTMENT OF SCIENCE EDUCATION

Bobby N. Irby, Chair
Hattiesburg, MS 39406-5087
(601) 266-4739

The Department of Science Education, recognizing the increased emphasis on the art of science teaching and the additional opportunities for individuals with advanced training in these arts, provides a program for the Master of Education, Master of Science, Doctor of Philosophy, and Doctor of Education degrees in Science Education.

Any student who has successfully completed a Bachelor of Science or Bachelor of Arts degree in any area of science or combination of sciences, or has an equivalent academic preparation in the sciences, who demonstrates a minimum score on the aptitude section of the GRE of 850, or a total score of at least 1125 on the common and area examinations of the National Teacher Examinations (NTE), or a total score of at least 1965 for the three tests (Communication Skills, General Knowledge, and Professional Knowledge) of the Core Battery of the NTE, or a score of at least 39 on the Miller Analogies Test for a master's and 1000 on the GRE for the doctoral degrees, who has a grade point average of at least 3.0 for a master's and 3.5 for doctoral, and who meets the requirements set forth by the Graduate School of the University of Southern Mississippi, is eligible to pursue a program in Science Education. A student who does not meet all the above requirements may be admitted conditionally.

In addition to the general requirements and procedures pertaining to graduate degrees as outlined previously in this **Bulletin**, the following requirements must be fulfilled.

MASTER'S PROGRAM

1. Hold A certification.
 - (a)—If the student does not hold certification he or she will be expected to enroll in courses necessary to complete this deficiency
 - (b)—These courses will not satisfy requirements for the master's degree.
2. Completion of a minimum of thirty-four (34) semester hours of graduate work.
 - (a)—A minimum of twelve (12) semester hours in a specific science—biology, chemistry, earth and environmental sciences, or physics.
 - (b)—Nine (9) semester hours in a related science.
 - (c)—Six (6) semester hours in professional education area (REF 601 and REF 607). Please see requirements for AA certification.
 - (d)—Seven (7) semester hours (including seminar from the Department of Science Education and a maximum of three (3) semester hours of special problems).

A thesis carrying six semester hours is optional and would substitute for two courses in Science Education. The total program with thesis requires thirty-four (34) semester hours graduate credit. The thesis may involve research in a particular science or research in science education.

DOCTORAL PROGRAM

Teaching Program

1. Possess a master's degree and hold an AA certification in one of the sciences or the equivalency thereof.
2. Complete successfully an additional forty-eight (48) semester hours of graduate work beyond the master's degree excluding the dissertation which will include:
 - (a)—Fifteen (15) semester hours in a specific science (minimum of)
 - (b)—Nine (9) semester hours in a related science (minimum of)
 - (c)—Three (3) semester hours in professional education (minimum of)
 - (d)—Eighteen (18) semester hours in science education (five (5) courses and three (3) seminars — maximum of 6 semester hours special problems)
 - (e)—Six (6) semester hours of electives - science education, specific science, or professional education
3. Complete an acceptable dissertation.

Additional requirements include demonstrated proficiency in educational statistics and independent research. Research, culminating in a dissertation, may deal with a program in the student's science specialty or a problem in science education. However, the research problem must address educational needs related to the teaching of science.

During a student's first or second semester of enrollment, the department will require a written and/or oral qualifying examination. This examination is designed to assess both the student's fitness to pursue doctoral work and to assist the committee members in planning his or her doctoral program. A written and/or oral comprehensive examination must be taken at or near the completion of the candidate's course work. Upon acceptance of the dissertation by the candidate's committee and at least four weeks prior to graduation, a final oral examination in defense of the candidate's dissertation will be administered. The Department of Science Education furthermore requires that the candidate's research be acceptable for publication in journals in his or her field.

In addition to an evaluation of the student's record, tests and examinations are used for diagnostic purposes in planning programs. **The Graduate Record Examinations** verbal and quantitative score should be submitted with the application for advanced graduate study.

Non-Teaching Program

Emphasis in Mathematics and Computer Science

Mathematics

1. Hold a master's degree with emphasis in mathematics or the equivalency thereof.
2. Complete successfully an additional fifty-seven (57) semester hours of graduate course work beyond the master's.
3.
 - a) Twenty-four (24) semester hours in mathematics.
 - b) Twenty-four (24) semester hours in science education.
 - c) Nine (9) semester hours of electives from science education, mathematics, related area, or professional education.

Computer Science

1. Hold a master's degree with emphasis in computer science or the equivalency thereof.
2. Complete successfully an additional fifty-seven (57) semester hours of graduate course work beyond the master's.

3. a) Eighteen (18) semester hours in computer science.
b) Nine (9) semester hours in a related science education emphasis.
c) Twenty-four (24) semester hours in science education.
d) Six (6) semester hours of electives from science education, mathematics, related area or professional education.

The non-teaching program in mathematics and computer science requires the completion of an acceptable dissertation in the emphasis area. Additional requirements include demonstrated proficiency in educational statistics and independent research. Research, culminating in a dissertation, must deal with a problem in the content emphasis and may or may not relate to education.

During a student's first or second semester of enrollment, the department will require a written and/or oral qualifying examination. This examination is designed to assess both the student's fitness to pursue doctoral work and to assist the committee members in planning his or her doctoral program. A written and/or oral comprehensive examination must be taken at or near the completion of the candidate's course work. Upon acceptance of the dissertation by the candidate's committee and at least four weeks prior to graduation, a final oral examination in defense of the candidate's dissertation will be administered. The Department of Science Education furthermore requires that the candidate's research be acceptable for publication in journals in his or her field.

In addition to an evaluation of the student's record, tests and examinations are used for diagnostic purposes in planning programs. The **Graduate Record Examinations** verbal and quantitative score should be submitted with the application for advanced graduate study.

UNIVERSITY OF SOUTHERN MISSISSIPPI GULF COAST

Joe E. Holloway, Dean
East Beach Boulevard
Long Beach, MS 39560
(601) 865-4500

The University of Southern Mississippi Gulf Coast serves students at three locations: the Gulf Park Campus in Long Beach, the Keesler Center on Keesler Air Force Base, and USM Jackson County Center located on the Jackson County Campus of the Mississippi Gulf Coast Community College in Gautier. Refer to the USM Gulf Coast Regional Campus Bulletin for specific information concerning the Gulf Coast courses and programs.

GRADUATE DEGREE PROGRAMS

USM Gulf Coast provides a flexible delivery system designed to react to the educational needs of Coast citizens. Consequently, new courses are added to the schedule as student demand warrants and resources permit. A sufficient number of courses are now being offered so that USM Gulf Coast students may earn the following graduate degrees:

Master's Degrees

Adult Education	Nursing
Business Administration	Political Science
Computer Science	Public Administration
Criminal Justice	Reading
Educational Administration and Supervision	Secondary Education
Elementary Education	Special Education
Industrial and Vocational Education	Teleprocessing

Specialist's Degrees

Adult Education	Educational Administration
Elementary Education	Secondary Education
Special Education	

Admission

USM Gulf Coast graduate admission requirements and procedures are identical with those outlined elsewhere in this **Bulletin**, except that procedures are initiated through the USM Gulf Coast Director of Student Services. In order to facilitate proper advisement and predetermination of admission status, students should furnish transcripts and complete applications for admission prior to registration to the Director of Student Services. Transcripts and completed applications should be sent to the Director of Student Services, USM Gulf Coast, Long Beach, MS 39560.

Graduate Residency Requirements

Specialist and doctoral level students are reminded that graduate residency requires intensive full-time study of an individualized nature. In addition, some departments have options to meet specialized needs. These students must have their degree plans approved in writing in advance by their department chair prior to course enrollment.

Course Load

Although the maximum full load of a full-time graduate student is 32 semester hours for three terms, the normal course load is 9 semester hours per term. A minimum of 6 semester hours per term is required for a student to be considered full-time for Veterans Affairs, student loans, and other such benefits. Workshop credit as well as courses taken on the Hattiesburg campus shall be counted as part of the course load.

Fees

Undergraduate students	\$68.00 per semester hour
Graduate students	\$90.00 per semester hour

A general tuition level cap of \$617.00 has been set for undergraduate students enrolled for 9-14 hours and \$635.00 for graduate students enrolled for 7-14 hours. Undergraduate students enrolled for more than 14 hours will be assessed \$68.00 for each additional hour and graduate students enrolled for more than 14 hours will be assessed \$90.00 for each additional hour. Students enrolled in the Nursing program, which is on the semester calendar, will be assessed fees on the same schedule as students on the Hattiesburg campus.

Undergraduate Fees		Graduate Fees	
(Including \$5.00 Registration Fee)		(Including \$5.00 Registration Fee)	
1 hour	\$ 73.00	1 hour	\$ 95.00
2 hours	\$141.00	2 hours	\$185.00
3 hours	\$209.00	3 hours	\$275.00
4 hours	\$277.00	4 hours	\$365.00
5 hours	\$345.00	5 hours	\$455.00
6 hours	\$423.00	6 hours	\$545.00
7 hours	\$481.00	7-14 hours	\$635.00
8 hours	\$549.00		
9-14 hours	\$617.00		

Undergraduate students who are non-residents will be assessed an additional fee of \$50.00 per semester hour up to a maximum of \$394.00. The additional non-resident fee of \$394.00 will be assessed to only those graduate students enrolled for six or more semester hours.

Students who enroll concurrently between USM Hattiesburg and USM Gulf Coast must pay separate fees for the USM Gulf Coast courses. Fees are subject to change without prior notice. More detailed fee information is available in the term schedules published quarterly.

Calendar

USM Gulf Coast offers four ten-week terms per year. Holidays follow the same schedule as the Hattiesburg Campus Calendar found elsewhere in this **Bulletin**.

TERM	REGISTRATION	
Fall 1990-91	August 22, 1990	Keesler and Jackson County
	August 23, 1990	Gulf Park
Winter 1990-91	November 7, 1990	Keesler and Jackson County
	November 8, 1990	Gulf Park
Spring 1990-91	February 20, 1991	Keesler and Jackson County
	February 21, 1991	Gulf Park
Summer 1990-91	May 29, 1991	Keesler and Jackson County
	May 30, 1991	Gulf Park

DIVISION OF NURSING

TERM	REGISTRATION	
Fall 1990-91	August 22, 1990	Keesler and Jackson County
	August 23, 1990	Gulf Park
Spring 1990-91	January 14, 1991	Gulf Park
Summer 1990-91	May 29, 1991	Keesler and Jackson County
	May 30, 1991	Gulf Park

SPECIAL DEGREE PROGRAM

The Master of Science in Teleprocessing Science is administered by the Department of Computer Science and Statistics within the College of Science and Technology of The University of Southern Mississippi in cooperation with the Communications-Computer Systems Staff Officer Course at Keesler Air Force Base, Biloxi, Mississippi.

The purpose of the program is to provide the knowledge and skills necessary to function at the executive level in the management of teleprocessing, telecommunications, and electronics systems in both military and civilian sectors. In addition to courses in communications, emphasis is placed on computer science, management, and statistics with an additional option of public administration.

In addition to meeting the entrance requirements set forth by the Graduate School of The University of Southern Mississippi, requirements for regular admission include an undergraduate GPA of at least 2.75/4.0 and a Graduate Record Examination Score in excess of 1000 (verbal plus quantitative).

Conditional admission may be granted to students with an undergraduate GPA between 2.5 and 2.75 provided they attain a score of at least 1000 on the GRE. Conditional admission may be granted to students with a GRE score less than 1000 provided they have an undergraduate GPA of 3.50 or higher.

Students not meeting the minimum requirements for regular admission are encouraged to submit additional information which documents their potential for doing graduate work. This would include industrial work experience and training and graduate work already completed. Students may submit GRE scores no more than twice.

The Teleprocessing Science program is open to both military and civilian personnel. Undergraduate preparation in any of a wide variety of areas is acceptable. Application should be made through the Office of Student Services, USM Gulf Coast.

The curriculum for the major in Teleprocessing Science includes the following coursework.

Hours

GBA 625 and MGT 615	
or	
CSS 515 and CSS 516	Statistics..... 6
MGT 620 Human Rel. & Orgn. Theory 3
MGT 669 Behav. Dynamics in Org. 3
CSS 630 Comm. Engr. Fund. 3
CSS 631 Analog & Digital Comm. 3
CSS 632 Comm. Sys. Analysis 3
CSS 633 Computer Comm. 3
CSS 500 Intro Computer Ed.	
CSS 600 Mgt. of Computer Sys.	Two of Three
CSS 678 Comp. Control Sys.	
	OR 6
PS 571 Pub. Pers. Admin.	
PS 572 Organ & Mgt.	Two of Three
PS 574 Govt. Budgetary Proc.	
Guided Electives 6

 Total: 36

The guided electives must be courses which relate to the teleprocessing curriculum and which are chosen with the consent of the program adviser.

COURSE DESCRIPTIONS

INDEX OF ABBREVIATIONS FOR FIELDS OF INSTRUCTION

ACC	Accounting	HIS	History
ACT	Architectural Engineering Technology	HRT	Hotel, Restaurant, and Tourism Management
ADE	Adult Education	HSE	Health and Safety Education
AMS	American Studies	IB	International Business
ANT	Anthropology	INT	Industrial Engineering Technology
ARE	Art Education	IVE	Industrial and Vocational Education
ART	Art	JOU	Journalism
BCT	Building Construction Technology	LAT	Latin
BED	Business Education	LS	Library Science
BSC	Biological Sciences	MAR	Marine Science
CD	Child Development	MAT	Mathematics
CET	Computer Technology	MBI	Marine Biology
CHE	Chemistry	MED	Music Education
CI	Curriculum and Instruction:	MET	Mechanical Engineering Technology
	CIE Elementary	MFG	Manufacturing Technology
	CIS Secondary	MGT	Management
CJ	Criminal Justice	MIS	Management Information Systems
COM	Communication	MKT	Marketing
CPY	Counseling Psychology	MTC	Medical Technology
CSA	Coaching and Sports Administration	MUP	Music Performance Studies
CSC	Computer Science	MUS	Music
CSS	Computer Science and Statistics	NSG	Nursing
CT	Clothing and Textiles	PED	Physical Education
DAN	Dance	PHI	Philosophy
ECO	Economics	PHY	Physics
ED	Economic Development	PLG	Planning
EDA	Educational Administration	PS	Political Science
ELT	Electronics Engineering Technology	PSC	Polymer Science
ENG	English	PSY	Psychology
ESC	Environmental Science	REC	Recreation
FAM	Family Relations	REF	Research and Foundations
FEM	Family Economics and Management	REI	Real Estate and Insurance
FIN	Finance	REL	Religion
FL	Foreign Languages	RTF	Radio-Television-Film
FN	Food and Nutrition	SCE	Science Education
FRE	French	SCM	Speech Communication
FSC	Forensic Science	SHS	Speech and Hearing Sciences
FSM	Food Service Management	SOC	Sociology
FST	Food Science Technology	SPA	Spanish
GBA	General Business Administration	SPE	Special Education
GER	German	SWK	Social Work
GHY	Geography and Area Development	THE	Theatre
GLY	Geology	THY	Therapy
HEE	Home Economics Education	TOX	Toxicology
		TSE	Traffic Safety Education

The plus (+) sign in front of a course indicates that a special fee is charged for that course. (See SPECIAL FEES AND EXPENSES.)

ACCOUNTING (ACC-605)

502. Advanced Accounting II. 3 hrs. Prerequisite: ACC 401 with a grade of C or better. An introduction to consolidated financial statements, accounting for fiduciaries, and governmental accounting.

505. Current Accounting Theory and Research. 3 hrs. Prerequisite: ACC 401 with a grade of C or better. A study of the accounting literature with emphasis on current developments.

510. Auditing II. 3 hrs. Prerequisite: ACC 409 with a grade of C or better. An in-depth study of the auditor's attest function with emphasis on current literature.

511. Financial Accounting. 3 hrs. Prerequisite: Computer literacy. Fundamentals of accumulating, reporting, and interpreting financial accounting information for internal and external uses.

520. Advanced Cost Accounting and Budgeting. 3 hrs. Prerequisite: ACC 320 with a grade of C or better. The development of accounting data for managerial use.

530. Federal Income Tax Accounting II. 3 hrs. Prerequisite: ACC 330 with a grade of C or better. The environment of business as affected by the federal income tax law.

540. Contemporary Problems in Accounting. 3 hrs. Prerequisite: Acc 401. A CPA preparation course focusing on theory and practice.

560. Managerial Accounting. 3 hrs. Prerequisite: MBA 511. An analysis of the use of accounting information in managerial decision making.

592. Research in Accounting Problems. 1-3 hrs. Prerequisite: Permission of adviser. Individual study of specific topics in accounting.

605. Advanced Accounting Theory. 3 hrs. Prerequisites: 15 hours of accounting above accounting principles. Study of financial accounting literature.

610. Advanced Problems in Public Accounting. 3 hrs. Prerequisites: 15 hours of accounting above accounting principles including ACC 409. A study of current topics in public accounting practice.

620. Seminar on Controllershship and Accounting Systems. 3 hrs. The interrelationship of the controller and modern information systems.

630. Tax Seminar I. 3 hrs. Prerequisites: ACC 330 and 430 or equivalent. Tax planning and research.

631. Tax Seminar II. 3 hrs. Prerequisite: ACC 430. Estate planning, deferred compensation, and the legal and ethical aspects of tax practice.

692. Special Problems in Accounting. 3 hrs. Individual study of specific topics in accounting.

698. Thesis. 1-6 hrs. for a total of 6 hrs.

ADULT EDUCATION (ADE-110)

540. Methods and Materials in Adult Education. 3 hrs. A course in method and format of instructional materials for adults with emphasis on self-instructional techniques.

541. Foundations of Reading Instruction for the Adult. 3 hrs. This course involves an examination of the basis of reading instruction for the nonliterate adult.

542. Methods and Materials for Teaching Adults to Read. 3 hrs. Instructional and diagnostic materials and methods for dealing with functionally illiterate adults.

545. Teaching the Disadvantaged Adult. 3 hrs. A study of the educational problems of culturally deprived and handicapped adults in terms of programs and procedures found to be successful.

576. **Learning in Adult Education.** 3 hrs. A study of learning in adulthood, and related to a range of educational programs.

580. **Applied Educational Gerontology.** 3 hrs. This course prepares individuals to design and implement educational programs for older adults.

590. **Special Problems in Adult Education.** 1-3 hrs. Special areas of interest arranged for an individual or a group with common interests.

597. **Interdisciplinary Seminar in Developmental Disabilities.** 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.

601. **Principles of Adult Education.** 3 hrs. A survey of the history, philosophies, form, structure, and current developments in the field of adult education.

602. **Organization and Administration of Adult Education.** 3 hrs. A survey of organizational and management theory as applied to adult education agencies. The case study approach is used.

607. **Program Planning and Curriculum Development in Adult Education.** 3 hrs. The design of programs and courses of study related to a wide variety of adult education agencies.

650. **Issues in Adult Education.** 3 hrs. Examination of contemporary issues related to the education and learning of adults in a seminar format.

692. **Special Problems I, II, III.** 1-3 hrs. A study to develop knowledge and facility in a field of special interest to the student. Requires preparation of a scholarly paper under supervision of a graduate professor.

701. **Delivery Systems for Adult Education.** 3 hrs. Prerequisites: ADE 601 and ADE 607. Introduction and orientation to a variety of organizations and agencies responsible for conducting adult education programs.

737. **Practicum in Adult Education.** 3 hrs. A direct work experience in an adult education setting unrelated to student's employment.

741. **Assessment in Adult Education.** 3 hrs. Prerequisite: ADE 576, REF 601, or permission of instructor. Explore, develop, and evaluate various assessment methods and strategies used in adult education.

750. **Education and the Older Adult.** 3 hrs. A study of the elderly adult and the implications of those characteristics for adult education programs.

760. **Readings in Adult Education.** 3 hrs. Students select readings in the adult education literature for discussion in a seminar format.

791. **Research in Adult Education.** 1-16 hrs. Prerequisite: Approval of the major professor.

792. **Special Problems.** 3 hrs.

794. **Field Problems in Adult Education I, II, III.** 1-3 hrs. arr. A project dealing with a specific problem in an adult education agency. Registration must be approved by student's major professor and departmental chairman.

797. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

798. **Specialist Thesis.** 6 hrs. A field study or thesis type research study representing the major research component of the specialist's degree.

889. **Seminar in Adult Education.** 3 hrs. Seminar required for adult education doctoral students in residence. Emphasizing current issues in adult education selected by students in consultation with faculty.

898. **Dissertation.** 12 hrs.

AMERICAN STUDIES (AMS-204)

504. **Issues in America.** 3 hrs. Topics vary according to professor and department.

599. **British Studies: Anglo-American Studies.** 3-6 hrs. A seminar conducted in Great Britain under the auspices of the USM Institute of Anglo-American Studies.

ANTHROPOLOGY (ANT-286)

SOC 560. **Quantitative Methods.** 3 hrs. May also be offered for credit as an anthropology course.

SOC 562. **Methods of Social Research.** 3 hrs. May also be offered for credit as an anthropology course.

SOC 681. **Departmental Seminar I.** 1 hr. May also be offered for credit in anthropology.

SOC 682. **Departmental Seminar II.** 1 hr. May also be offered for credit in anthropology.

SOC 683. **Departmental Seminar III.** 1 hr. May also be offered for credit in anthropology.

511. **Foundations of Indo-European Thought and Culture.** 3 hrs. A comparative approach to the background of western culture, utilizing linguistics, mythology, and archaeology.

516. **Ethnographic Field Methods.** 1-6 hrs. Methods of ethnographic fieldwork through participation in organized field studies. Permission of instructor required.

520. **Culture and Ethnicity.** 3 hrs. An analysis of culture and ethnicity with special reference to the problem of modernization.

521. **Anthropological Theory.** 3 hrs. A general survey of historical anthropological thought and of the major contemporary schools of anthropological theory.

522. **Mythology and Folklore.** 3 hrs. The utilization of folklore and mythological data in anthropological research.

523. **Economic Anthropology.** 3 hrs. The evolution of economic systems, cross-cultural analysis of economic systems, and the role of economic forces in cultural change.

524. **Primitive Religion.** 3 hrs. Beliefs and rituals in tribal society, shamanism and trance states; animism and magic; altered states of consciousness in religious ideology evidences of prehistoric religion, and revitalization movements.

525. **Kinship and Social Organization.** 3 hrs. A comparative study of kinship and social organization, and a survey of the major anthropological theories concerning organizational variability.

527. **Psychological Anthropology.** 3 hrs. Cross-cultural analysis of personality formation, perception and cognition, mental illness, and altered states of consciousness.

528. **Political Anthropology.** 3 hrs. A comparative survey of patterns of group decision-making, leadership, resolution of conflict and social control in human societies.

529. **Topics in Cultural Anthropology.** 3 hrs. Variable content. May be repeated three times in separate topical offerings.

531. **Prehistoric Archaeology.** 3 hrs. Corequisite: ANT 531L. Overview of analytical techniques and prehistoric technologies.

531-L. **Prehistoric Archaeology Laboratory.** 1 hr. Laboratory to accompany Prehistoric Archaeology (ANT 531).

533. **Prehistory of Southeastern Indians.** 3 hrs. A survey of the prehistoric archaeology of the Southeastern United States, especially Mississippi and adjoining states, from first inhabitants to the time of European contact.

536. **Archaeology Field Methods.** 3 hrs. Methods of fieldwork through participation in organized field projects.

539. **Topics in Archaeology.** 3 hrs. Variable content. May be repeated three times in separate topical offerings.

542. **Medical Anthropology.** 3 hrs. Introduction to the relationship between human culture and disease especially cross-cultural comparisons of perception and treatment of illness.

549. **Topics in Physical Anthropology.** 3 hrs. Variable content. May be repeated three times in separate topical offerings.

559. **Topics in Linguistic Anthropology.** 3 hrs. Variable contents. May be repeated three times in separate topical offerings.

599. **British Studies.** 3-6 hrs. Variable content. Lecture series and research offered abroad under the auspices of the Institute of Anglo-American Studies.

601. **Teaching Anthropology.** 1-3 hrs. An in-depth examination of the resources and techniques of introducing undergraduates to the discipline of anthropology. May be repeated three times.

607. **Applied Anthropology.** 3 hrs. The application of anthropology to the solution of contemporary social and cultural problems.

621. **Seminar in Ethnology.** 3 hrs. A comprehensive examination of method and theory in contemporary sociocultural anthropology, focusing particularly on the problems of ethnographic production and comparative analysis.

631. **Seminar in Archaeology.** 3 hrs. An in-depth examination of the method and theory of anthropological archaeology.

641. **Seminar in Physical Anthropology.** 3 hrs. A comprehensive examination of the method and theory of physical anthropology.

651. **Seminar in Anthropological Linguistics.** 3 hrs. An in-depth examination of the method and theory of anthropological linguistics.

620. **Seminar in Research Methods I.** 3 hrs. Logic and methods of anthropological research, emphasizing collection of a suitable body of data.

621. **Seminar in Research Methods II.** 3 hrs. Logic and methods of anthropological research, emphasizing analysis of data.

692. **Special Problems.** 1-3 hrs.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs.

792. **Special Study Projects in Anthropology.** 1-6 hrs. Special projects in reading, survey, or research in anthropology.

ARCHITECTURAL ENGINEERING TECHNOLOGY (ACT-392)

592. **Special Problems.** 1-3 hrs. Prerequisite: Senior standing and approval of faculty adviser.

ART (ART-660)

500. **The Art of Italy.** 3 hrs. An examination of art in Italy.

513. **Crafts II.** 3 hrs. The creation and design of jewelry.

514. **Crafts III.** 3 hrs. The creation of surface designs for fabrics.

531. **Ancient Art.** 3 hrs. 4000 B.C. to *circa* 600 A.D.

532. **Medieval Art.** 3 hrs. 600 A.D. to *circa* 1300 A.D.

533. **Renaissance Art.** 3 hrs. 1400 AD to 1600 A.D.

534. **Baroque and Rococo Art.** 3 hrs. 17th and 18th centuries.

535. **Nineteenth Century Art.** 3 hrs.

536. **Twentieth Century Art.** 3 hrs.

598. **British Studies, Art History.** 3 or 6 hrs. Variable content. Lecture series and research offered abroad under the auspices of the Institute of Anglo-American Studies.

599. **British Studies, Art Studio.** 3 or 6 hrs. Variable content. Studio series offered abroad under the auspices of the Institute of Anglo-American Studies.

600. **Studio Foundations.** 3 hrs. A review, through studio problems, of some fundamental problems of plastic expression. Hours earned may not be used to fulfill degree requirements.

601. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor required for admission.

602. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor required for admission.

603. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor required for admission.

610. **Crafts: Jewelry Design for Teachers.** 3 hrs. The study of visual forms as pertaining to the jewelry crafts.

615. **Trends in Current Plastic Expression.** 3 hrs. A course designed to keep the student abreast of current trends in the plastic arts.

620. **Adapting Selected Current Art Trends to School Practice.** 3 hrs. Current art trends are identified and selections of them are developed in terms of philosophies, practitioners, background, and techniques.

621. **Painting Studio.** 3 hrs. Form problems in painting. Professional level of performance with intense criticism. Permission of instructor required for admission.

622. **Painting Studio.** 3 hrs. Form problems in painting. Professional level of performance with intense criticism. Permission of instructor required for admission.

623. **Painting Studio.** 3 hrs. Form problems in painting. Professional level of performance with intense criticism. Permission of instructor required for admission.

651. **Ceramics Studio.** 3-9 hrs.

701. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor required for admission.

702. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor required for admission.

703. **Drawing Studio.** 3 hrs. Form problems in drawing. Professional level of performance with intense criticism. Permission of instructor required for admission.

721. **Painting Studio.** 3 hrs. Form problems in painting. Professional level of performance with intense criticism. Permission of instructor required for admission.

722. **Painting Studio.** 3 hrs. Form problems in painting. Professional level of performance with intense criticism. Permission of instructor required for admission.

723. **Painting Studio.** 3 hrs. Form problems in painting. Professional level of performance with intense criticism. Permission of instructor required for admission.

739. **Directed Study in Art History/Criticism.** 1-6 hrs. for a total of six hours.

760. **Seminar.** 1 hr.

761. **Seminar.** 1 hr.

762. **Seminar.** 1 hr.

799. **Creative Project.** 6 hrs.

ART EDUCATION (ARE-665)

600. **Art Education Theory.** 2 hrs. A comprehensive survey of Art Education trends and philosophies.

601. **Introduction to Research in Art Education.** 3 hrs. A study of current research and research techniques in the area; includes the compilation of bibliographic material and the organization of research projects.

602. **Art Techniques and Materials for Teachers.** 3 hrs. A comprehensive survey of teaching techniques emphasizing the pedagogical potential and limitation of plastic media.

603. **Characteristics of Visual Relationships for Teachers.** 3 hrs. A course dealing with the teaching of the visual characteristics and arrangement of visual relationships.

604. **Teaching the Exceptional Student Contemporary Processes.** 3 hrs. A course devoted to the pedagogical potential of contemporary processes for use with exceptional students.

605. **Techniques of Dissemination of Student Art Work.** 3 hrs. Techniques of advanced pedagogy in the selection, display, and showing of student work.

606. **History and Philosophy of Art Education.** 3 hrs. An integrative, historical, and philosophical study of Art Education.

616. **Advanced Art Seminar for Teachers in Elementary Education.** 3 hrs. An advanced study of the scope and sequence of art education curricula. The coordination of art programs with sequential studies will be stressed.

625. **Supervision of Art Education Programs.** 3 hrs. A study of the problems involved in the supervision of public school art programs in grades K through twelve.

626. **Curriculum and Instruction in Art Education.** 3 hrs. A study of the art curricula and instructional programs in the public schools in grades K through twelve.

691. **Research in Art Education.** 1-16 hrs. Prerequisite: Approval of the major professor.

692. **Special Problems in Art Education I, II, III.** 1-3 hrs. each.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs. A conventional thesis.

BIOLOGICAL SCIENCES (BSC-300)

500. **History of Biology.** 3 hrs. Lectures and papers concerning the development of biological sciences.

501. **Natural History of Animals.** 1 hr. Prerequisite: Consent of instructor. Life histories of animals. Designed for teachers.

+ 501-L. **Natural History of Animals Laboratory.** 2 hrs.

502. **Natural History of Plants.** 1 hrs. Prerequisite: Consent of instructor. Life histories of plants.

+ 502-L. **Natural History of Plants Laboratory.** 2 hrs.

503. **Natural History of Infectious Diseases.** 3 hrs. A study of infectious diseases and their effect on man.

504. **Field Biology.** 1-2 hrs. arr. Ecological and taxonomic studies. Offered between semesters as 4- to 12-day field trips.
- + 504-L. **Field Biology Laboratory.** 2-4 hrs. To be taken concurrently with BSC 504.
505. **Principles of Nomenclature.** 3 hrs. Prerequisite: Consent of instructor. Discussions and problems in biological nomenclature.
506. **Zoogeography.** 3 hrs. Prerequisite: Consent of instructor. A descriptive and analytical study of the distribution of animals.
507. **Protozoology.** 2 hrs. Introduction to parasitic and free-living protozoa.
- + 507-L. **Protozoology Laboratory.** 1 hr.
508. **Invertebrate Zoology I.** 2 hrs. Functional morphology, systematics, and life histories of the phyla Porifera through the minor protostomes.
- + 508-L. **Invertebrate Zoology I Laboratory.** 1 hr.
509. **Invertebrate Zoology II.** 2 hrs. Prerequisite: BSC 507. Functional morphology, systematics, and life histories of invertebrate phyla through the Hemichordata.
- + 509-L. **Invertebrate Zoology II Laboratory.** 1 hr.
510. **Human Parasitology.** 3 hrs. Life histories, medical significance, and diagnosis of helminths and protozoa parasitic in man.
- + 510-L. **Human Parasitology Laboratory.** 1 hr.
511. **Entomology.** 2 hrs. Structural adaptations, classification, life histories and habits, and the economic importance of insects.
- + 511-L. **Entomology Laboratory.** 1 hr.
512. **Medical Entomology.** 2 hrs. Prerequisite: Consent of instructor. Arthropod vectors and agents of disease.
- + 512-L. **Medical Entomology Laboratory.** 1 hr.
513. **Arachnida Biology.** 2 hrs. Biology, morphology, and classification of the arachnids.
- + 513-L. **Arachnida Biology Laboratory.** 1 hr.
514. **Ichthyology.** 2 hrs. Evolutionary relationships, morphology, physiology and zoogeography of fishes, with emphasis on identification of local forms.
- + 514-L. **Ichthyology Laboratory.** 1 hr.
515. **Biology of Fishes.** 2 hrs. Prerequisite: Consent of instructor. Function morphology, ecology and behavior of fishes.
- + 515-L. **Biology of Fishes Laboratory.** 1 hr.
516. **Introduction to Fishery Science.** 2 hrs. A survey of the biology, management, and potential yield of fish populations.
- + 516-L. **Introduction to Fishery Science Laboratory.** 1 hr.
517. **Herpetology.** 2 hrs. Collection, preservation, identification, and distribution of amphibians and reptiles. Field trips when possible.
- + 517-L. **Herpetology Laboratory.** 1 hr.
518. **Ornithology.** 2 hrs. Prerequisite: BSC 361 recommended. Morphology, taxonomy, life history, distribution, evolution, and adaptations of birds.
- + 518-L. **Ornithology Laboratory.** 1 hr.
519. **Mammalogy.** 2 hrs. Prerequisite: BSC 361 recommended. Morphology, taxonomy, life history, distribution, evolution, and adaptations of mammals.
- + 519-L. **Mammalogy Laboratory.** 1 hr.
521. **Marine Invertebrate Zoology.** 3 hrs. Morphology, distribution and ecology of the phyla from Protozoa through Protochordates.

520. **Speciation.** 3 hrs. Origin and evolution of species.

521. **Marine Invertebrate Zoology.** 3 hrs. Morphology, distribution and ecology of the phyla from Protozoa through Protochordates. May be taken as MAR 503.

+ 521-L. **Marine Invertebrate Zoology Laboratory.** 3 hrs. Corequisite for BSC 521.

523. **History of Science and Technology.** 3 hrs. Traces the development of science and technology and their role in society from the Renaissance to the present. (Cross-listed as HIS 523 and PHY 585.)

524. **Parasites of Marine Animals.** 3 hrs. Prerequisite: Permission of instructor. Emphasis on morphology, taxonomy, life histories, and host-parasite relationships.

+ 524-L. **Parasites of Marine Animals Laboratory.** 3 hrs. Corequisite for BSC 524.

525. **Marine Phycology.** 2 hrs. Prerequisites: General botany and plant taxonomy. A survey of the principal groups of marine algae.

+ 525-L. **Marine Phycology Laboratory.** 2 hrs. Corequisite for BSC 525.

526. **Introductory Mycology.** 2 hrs. Prerequisite: Consent of instructor. Taxonomy, physiology, and biochemistry of fungi.

+ 526-L. **Introductory Mycology Laboratory.** 1 hr.

527. **Introductory Phycology.** 2 hrs. Prerequisite: Consent of instructor. Taxonomy, physiology, and biochemistry of the algae. May be taken as MAR 520.

+ 527-L. **Introductory Phycology Laboratory.** 1 hr. May be taken as MAR 520L.

528. **Plant Anatomy.** 2 hrs. A study of the anatomy of vascular plants.

+ 528-L. **Plant Anatomy Laboratory.** 1 hr.

529. **Bryophytes and Vascular Plants.** 3 hrs. Life cycles, evolution, and morphology of bryophytes and vascular plants.

+ 529-L. **Bryophytes and Vascular Plants Laboratory.** 1 hr.

530. **Aquatic and Marsh Plants.** 2 hrs. Collection, identification, and ecology of plants of fresh and brackish water.

+ 530-L. **Aquatic and Marsh Plants Laboratory.** 1 hr.

531. **Plant Physiology.** 2 hrs. Prerequisite: Organic chemistry recommended. The basic physiological processes of green plants.

+ 531-L. **Plant Physiology Laboratory.** 1 hr.

532. **Economic Botany.** 2 hrs. Origin, distribution, and significance of plants most important to man.

+ 532-L. **Economic Botany Laboratory.** 1 hr.

533. **Taxonomy of Local Flora.** 2 hrs. The classification of the local flora.

+ 533-L. **Taxonomy of Local Flora Laboratory.** 1 hr.

534. **Dendrology.** 2 hrs. The taxonomic and ecological characteristics, and the distribution of trees.

+ 534-L. **Dendrology Laboratory.** 1 hr.

535. **Plant Ecology.** 2 hrs. Prerequisite: Advanced standing in botany. Relationship of plants to their environment.

+ 535-L. **Plant Ecology Laboratory.** 1 hr.

536. **Field Botany.** 6 hrs. Offered summers in Great Britain. Emphasis on native woody vegetation.

537. **Coastal Vegetation.** 2 hrs. A study of general and specific aspects of coastal vegetation, with emphasis on local examples. May be taken as MAR 521.

+ 537-L. **Coastal Vegetation Laboratory.** 1 hr. Corequisite for BSC 537.

538. **Salt Marsh Plant Ecology.** 2 hrs. The botanical aspects of local marshes: includes plant identification, composition, and structure. May be taken as MAR 522.

- + 538-L. **Salt Marsh Plant Ecology Laboratory.** 2 hrs. Corequisite for BSC 538.
- 539. **Marine Ecology.** 3 hrs. The relationship of marine organisms to their environment. May be taken as MAR 505.
- + 539-L. **Marine Ecology Laboratory.** 2 hrs. Corequisite for BSC 539.
- 540. **Ecology.** 2 hrs. Prerequisite: Consent of instructor. The study of the relationships of organisms to their environment and to each other.
- + 540-L. **Ecology Laboratory.** 1 hr.
- 541. **Population and Community Ecology.** 2 hrs. Collection, analysis, and interpretation of data on natural populations and communities.
- + 541-L. **Population and Community Ecology Laboratory.** 1 hr.
- 542. **Behavioral Ecology and Sociobiology.** 3 hrs. The adaptive significance of behavior.
- 543. **Freshwater Biology.** 1 hr. Prerequisite: Consent of instructor. The study of the biota of ponds, lakes, rivers, and streams.
- + 543-L. **Freshwater Biology Laboratory.** 2 hrs.
- 544. **Limnology.** 2 hrs. Prerequisites: BSC 540 and consent of instructor. The physical, chemical and biological dynamics of inland waters.
- + 544-L. **Limnology Laboratory.** 1 hr.
- 545. **Biological Oceanography.** 3 hrs. Marine biological regimes and the influence of geological, physical, and chemical oceanographic factors.
- + 545-L. **Biological Oceanography Laboratory.** 1 hr.
- 546. **Aquaculture.** 2 hrs. Prerequisites: 12 hours of biology and 8 hours of chemistry. Production of aquatic organisms in natural and artificial environments.
- + 546-L. **Aquaculture Laboratory.** 1 hr.
- 547. **Marine Aquaculture.** 3 hrs. Problems and procedures relating to the culture of commercially important crustaceans, fish, and mollusks. May be taken as MAR 507.
- + 547-L. **Marine Aquaculture Laboratory.** 3 hrs. Corequisite for BSC 547.
- 548. **Fauna and Faunistic Ecology of Tidal Marshes.** 1 hr. Taxonomy, distribution, trophic relationships, reproductive strategies and adaptation of tidal marsh animals.
- + 548-L. **Fauna and Faunistic Ecology of Tidal Marshes Laboratory.** 3 hrs. Corequisite for BSC 548. May be taken as MAR 506L.
- 549. **Marine Fisheries Management.** 2 hrs. Prerequisite: statistics recommended. A statistical review of the world fisheries. May be taken as MAR 510.
- + 549-L. **Marine Fisheries Management Laboratory.** 2 hrs. Corequisite for BSC 549. May be taken as MAR 510L.
- 550. **General Physiology.** 3 hrs. Organismic function and the adaptations which characterize major animal groups.
- + 550-L. **General Physiology Laboratory.** 1 hr.
- 551. **Mammalian Physiology.** 3 hrs. The functions of mammalian systems; inter-relationships and regulation are emphasized.
- + 551-L. **Mammalian Physiology Laboratory.** 1 hr.
- 552. **Environmental Physiology.** 2 hrs. Physiological adaptations enabling animals to meet environmental challenges.
- + 552-L. **Environmental Physiology Laboratory.** 1 hr.
- 553. **Invertebrate Physiology.** 2 hrs. A functional approach to the major invertebrate phyla.
- + 553-L. **Invertebrate Physiology Laboratory.** 1 hr.

554. **Endocrinology.** 3 hrs. Prerequisite: Consent of instructor. Survey of the endocrine system and its regulation of physiological processes.

555. **Animal Behavior.** 3 hrs. Classical and current concepts of animal behavior including individual and social behavioral patterns.

+ 555-L. **Animal Behavior Laboratory.** 1 hr.

560. **Pharmacology.** 3 hrs. Prerequisites: Vertebrate biology and organic chemistry. The response of living organisms to drugs.

561. **Histology.** 4 hrs. Prerequisite: 12 hours of biology. Microscopic anatomy of mammalian organ systems.

+ 561-L. **Histology Laboratory.** Must be taken concurrently with BSC 561; no separate credit given for the laboratory.

562. **Microtechnique.** 1 hr. Techniques for sectioning, mounting, and staining tissue and making whole mounts.

+ 562-L. **Microtechnique Laboratory.** 2 hrs.

563. **Pathobiology.** 2 hrs. Prerequisite: BSC 461 or 561. Principles of histopathology in vertebrates and invertebrates.

+ 563-L. **Pathobiology Laboratory.** 1 hr.

564. **Microscopy.** 2 hrs. Theory and use of the electron microscope and associated instrumentation, and darkroom techniques.

+ 564-L. **Microscopy Laboratory.** 1 hr.

565. **Embryology.** 2 hrs. Maturation, fertilization, cleavage, histogenesis, and organogenesis.

+ 565-L. **Embryology Laboratory.** 2 hrs.

566. **Human Embryology.** 3 hrs. Prerequisite: BSC 465 or 565. Factors which activate or regulate developmental processes.

567. **Diseases of Aquatic Animals.** 2 hrs. Bacterial, fungal, viral and parasitic diseases of freshwater and marine fish, shellfish, and crustacea.

+ 567-L. **Diseases of Aquatic Animals Laboratory.** 2 hrs.

569. **Comparative Histology of Marine Organisms.** 3 hrs. Histology of Marine organisms, including tissue processing techniques. May be taken as MAR 530.

+ 569-L. **Comparative Histology of Marine Organisms Laboratory.** 3 hrs. Corequisite for BSC 569. May be taken as MAR 530L.

571. **Advanced Genetics.** 2 hrs. Prerequisite: BSC 370 or 475 or 575. A continuation of BSC 370.

+ 571-L. **Advanced Genetics Laboratory.** 3 hrs. Corequisite for BSC 571. Laboratory exercises to illustrate basic genetic principles.

573. **Physiological Genetics.** 3 hrs. Prerequisite: BSC 471 or 571 or permission of instructor. Physiological concepts of heredity.

574. **Interpretation of Biological Data.** 3 hrs. Prerequisite: Permission of instructor. Techniques of design and interpretation of biological research data.

575. **Medical Genetics.** 3 hrs. The basic principles of human genetics with emphasis on the causation of abnormality and disease.

576. **Molecular Biology.** 3 hrs. Prerequisite: BSC 370 or 477. Molecular biology of viral, prokaryotic and eukaryotic systems.

577. **Microbial Genetics.** 3 hrs. Prerequisites: BSC 370, 380. The genetics and molecular biology of microorganisms and viruses.

+ 577-L. **Microbial Genetics Laboratory.** 1 hr. Prerequisite: Permission of instructor. Laboratory exercises to demonstrate principles of bacterial and viral genetics. Must be taken concurrently with BSC 577.

580. **Determinative Bacteriology.** 2 hrs. Principles of isolation, characterization and identification of higher bacteria.

+ 580-L. **Determinative Bacteriology Laboratory.** 2 hrs.

581. **Pathogenic Microbiology.** 2 hrs. Schemes for isolation and identification of major groups of disease-producing microorganisms.

+ 581-L. **Pathogenic Microbiology Laboratory.** 2 hrs.

582. **Advanced Pathogenic Microbiology.** 2 hrs. Continuation of BSC 581.

+ 582-L. **Advanced Pathogenic Microbiology Laboratory.** 2 hrs.

583. **Medical Mycology.** 2 hrs. Prerequisite: Permission of instructor. Consideration of the fungi of medical significance.

+ 583-L. **Medical Mycology Laboratory.** 1 hr.

584. **Virology and Tissue Culture.** 2 hrs. Viral classification, replication, and biochemistry; tissue culture technology.

+ 584-L. **Virology and Tissue Culture Laboratory.** 2 hrs.

585. **Viral Pathogenesis and Diagnosis.** 3 hrs. Host-viral interaction from a pathological and immunological viewpoint with isolation and laboratory characterization.

+ 585-L. **Viral Pathogenesis and Diagnosis Laboratory.** 1 hr.

586. **Immunology and Serology.** 3 hrs. Studies of infection, resistance, types of immunity and hypersensitivity.

+ 586-L. **Immunology and Serology Laboratory.** 1 hr. A laboratory introduction to cellular and serologic immune reactions and their diagnostic usefulness.

587. **Microbial Physiology.** 3 hrs. A comprehensive survey of bacterial structure, nutrition, and biochemistry.

+ 587-L. **Microbial Physiology Laboratory.** 1 hr.

588. **Food Microbiology.** 2 hrs. Microorganisms affiliated with the preparation, spoilage, pathogenicity, and sanitation of foods.

+ 588-L. **Food Microbiology Laboratory.** 2 hrs.

589. **Microbial Pollution of Water.** 2 hrs. Control of pure water supply.

+ 589-L. **Microbial Pollution of Water Laboratory.** 2 hrs.

590. **Marine Microbiology.** 3 hrs. Prerequisite: General Microbiology. An introduction to the role of microorganisms in the overall ecology of the oceans and estuaries.

+ 590-L. **Marine Microbiology Laboratory.** 2 hrs. Corequisite for BSC 590.

597. **Interdisciplinary Seminar in Developmental Disabilities.** 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.

604. **Early Life History of Marine Fishes.** 2 hrs. Reproductive strategies and early developmental processes of marine fishes. May be taken as MAR 604.

+ 604-L. **Early Life History of Marine Fishes Laboratory.** 2 hrs. Corequisite for BSC 604. May be taken as MAR 604L.

648. **Aquatic Insect Ecology.** 2 hrs. Prerequisites: BSC 411, 440, 443.

+ 648-L. **Aquatic Insect Ecology Laboratory.** 1 hr.

660. **Cell Biology for Teachers.** 3 hrs. Review and recent advances in cell biology. Not applicable to a graduate degree in Biological Sciences.

691. **Research.** 1-16 hrs.

692. **Special Problems.** 2-6 hrs.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who

are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs.

700. **Biological Photography.** 2 hrs. Techniques of biological photography.

701. **Analytical Methods in Biological Research.** 2 hrs. Prerequisite: Consent of instructor. Special techniques of data gathering and interpretation.

+ 701-L. **Analytical Methods in Biological Research Laboratory.** 1 hr.

707. **Planktology.** 2 hrs. Prerequisite: Permission of instructor. Morphological adaptations and life histories of plankton.

+ 707-L. **Planktology Laboratory.** 1 hr.

710. **Helminthology.** 3 hrs. Prerequisite: Consent of instructor. Readings and discussions of selected papers on helminthology.

717. **Advanced Herpetology.** 2 hrs. Systematics, natural history, distribution, and economic importance of reptiles and amphibians.

+ 717-L. **Advanced Herpetology Laboratory.** 1 hr.

726. **Advanced Botany.** 2 hrs. The general physiology and ecology of seed plants.

+ 726-L. **Advanced Botany Laboratory.** 1 hr.

740. **Topics in Marine Biology.** 2 hrs. Current topics in marine research.

741. **Fisheries Biology.** 2 hrs. Prerequisite: BSC 416 or 516, or consent of instructor. Statistics and management of exploited fish populations.

+ 741-L. **Fisheries Biology Laboratory.** 1 hr.

742. **Biological Oceanography.** 2 hrs. Prerequisite: BSC 441 or 541. The sea as a biological environment.

+ 742-L. **Biological Oceanography Laboratory.** 1 hr.

743. **Marine Ecology.** 2 hrs. Prerequisite: BSC 441 or 541. The marine environment and the ecology of marine organisms.

+ 743-L. **Marine Ecology Laboratory.** 1 hr.

750. **Physiology of Marine Animals.** 3 hrs. The environmental physiology of marine animals.

751. **Seminar in Animal Behavior.** 3 hrs. Topics in the behavior and ecology of animals.

752. **Seminar in Physiology.** 2 hrs. Special topics in physiology in areas of individual interest.

760. **Cell Ultrastructure.** 3 hrs. Prerequisite: Permission of instructor. Structure and function of cells and cell organelles at the sub-cellular level.

762. **Cytochemical Techniques.** 2 hrs. Prerequisite: BSC 464 or 564. Cytochemical characterization of biological significant compounds at microscopic levels.

+ 762-L. **Cytochemical Techniques Laboratory.** 1 hr.

770. **Cytogenetics.** 4 hrs. Prerequisite: BSC 470 or 570, or 471 or 571. Basic principles and techniques in human cytogenetics.

771. **Somatic Cell Genetics.** 3 hrs. Prerequisite: Permission of instructor. Basic theory and techniques of cell culture and their genetic applications.

772. **Dynamics of Experimental Populations.** 3 hrs. Prerequisite: Permission of instructor. Concepts of changes in population structure leading to the formation of species.

780. **Principles of Immunochemistry.** 3 hrs. A study of the chemistry of antigens, antibodies and complement and the mechanism of their interaction.

+ 780-L. **Principles of Immunochemistry Laboratory.** 1 hr.

781. **Immunoematology.** 3 hrs. A study of serological genetic, and anthropological aspects of human blood groups, isoantigens and antibodies.

782. **Advanced Microbial Physiology.** 4 hrs. Concepts of microbial nutrition, metabolism, adaptation, and genetics as related to growth and environment.

783. **Industrial Microbiology.** 4 hrs. An intensive study of microorganisms as applied to the production of organic compounds.

789. **Microbiology Seminar.** 1 hr. The presentation and defense of current, classical concepts and principles of microbiology. May be repeated for credit. All Microbiology graduate students must register for this course each semester.

790. **Biology Seminar.** 1 hr. The presentation of current concepts in special areas of individual interest.

791. **Research in Biology.** 1-16 hrs. Prerequisite: Approval of the major professor.

792. **Special Problems.** 2-6 hrs.

793. **Research in Zoology.** 1-6 hrs.

795. **Research in Genetics.** 1-9 hrs.

796. **Research in Microbiology.** 1-9 hrs.

797. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

898. **Dissertation.** 12 hrs.

BUSINESS EDUCATION (BED-105)

552. **History and Philosophy of Vocational Education.** 3 hrs. For business and distributive education teachers only. History, concepts, trends, occupations, employment opportunities, procedures, and techniques.

553. **Techniques of Coordination.** 3 hrs. Techniques and procedures used in coordinating office occupations and DE programs.

554. **Methods and Materials in Teaching Distributive Education.** 3 hrs. Principles, concepts, program plans, curricula, methods and materials, activities, research, and evaluation.

555. **Organization and Administration of Distributive Education.** 3 hrs. Basic problems, objectives, and characteristics of DE programs as applied in their development.

560. **Administrative Office Management.** 3 hrs. Principles of management; office organization, procedures, and supervision; layout, supplies, machines, personnel, forms, reports, and services.

565. **Microcomputers in Business Education.** 3 hrs. Skill development in use of multiple software packages relative to business education.

575. **Legal Secretaryship.** 3 hrs. Prerequisites: BED 104, 108, and 305. A course stressing the professional aspects of legal practices, procedures, and terminology.

576. **Medical Office Procedures and Records Management.** 3 hrs. Prerequisite: BED 102 or equivalent. Emphasis on the professional aspects of the work of a medical secretary.

577. **Medical Transcription.** 3 hrs. Prerequisites: BED 104 and 108. Emphasis on medical terminology, records, and forms with transcription from tapes.

578. **Advanced Medical Transcription.** 3 hrs. Prerequisite: BED 577. Emphasis on additional medical terminology, with increased emphasis on transcription.

579. **Review for the Certified Professional Secretary Examination.** 3 hrs. Preparation for CPS Examination. Does not count as credit toward a degree.
580. **Research and Report Writing.** 3 hrs. Concepts and methods of business research and style; problems in researching and reporting business data in written form.
592. **Special Problems.** 1-6 hrs. Study approved and directed by the department chairman.
602. **Concepts and Practices in Word Processing.** 3 hrs. To acquaint business teachers with word processing equipment and provide an overview of evolving concepts and practices in word processing, including the use of computers in WP, with "hands-on" keyboarding application. Laboratory included.
608. **Curriculums in Business Education.** 3 hrs. Factors influencing curriculum construction; content organization, instructional materials, and techniques.
651. **Principles of Business Education.** 3 hrs. Junior high through university programs; guidance; qualifications and professional activities of teachers; and public relations.
652. **Seminar in Business Education.** 3 hrs. An intensive study of specific problems in business education, and a survey of literature pertaining to the problems.
653. **Improvement of Instruction in Nonskill Subjects.** 3 hrs. Methodology, instructional materials, evaluation, and review of significant research in the nonskill subjects of bookkeeping, basic business, and consumer economics.
655. **Improvement of Instruction in Skills Subjects.** 3 hrs. Teaching procedures, instructional materials, measurement of skills, standards of achievement, and review of related research in typewriting, shorthand, and transcription.
669. **Measurement and Evaluation in Business Education.** 3 hrs. Concept of evaluation; construction, selection, administration, and scoring of tests; review of related research.
680. **Readings in Business Education.** 3 hrs. Readings in both periodical literature and research. Presentation of findings in a scholarly report. Approval of department chairman required.
691. **Research in Business Education.** 1-16 hrs.
692. **Special Problems I, II, III.** 1 hr. each. Prerequisite: 9 semester hours of advanced courses in business education. Scholarly paper on approved problem.
694. **Field Problems.** 3 hrs.
697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
698. **Thesis.** 1-6 hrs. for a total of 6 hrs.
701. **Seminar in Business Education.** 3 hrs. Analysis and evaluation of significant research studies in the field of business education and research of a problem.
750. **Business Education in the Junior College.** 3 hrs. Forces affecting junior college business curricula; philosophy; programs; public relations; trends, and related research.
760. **Administration and Supervision of Business Education.** 3 hrs. Principles; techniques of administration and supervision of business education in junior high, senior high, evening schools, and colleges.
780. **Readings in Business Education.** 3 hrs. Readings in both periodical literature and research. Presentation of findings in a scholarly report.
791. **Research in Business Education.** 1-16 hrs.

794. **Field Problems.** 1-3 hrs.

797. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

798. **Specialist Thesis.** 1-6 hrs.

CHEMISTRY (CHE-320)

500. **Chemical Literature.** 2 hrs. Prerequisites: CHE 352 and 311. The selection and use of the reference materials of chemistry: periodicals, journals, texts, patents, and other sources of information.

503. **Industrial Chemistry.** 4 hrs. Prerequisite: Permission of the instructor. Important processes used in industry. Invited industrial representatives and plant visits keep the topics current and useful.

504. **Spectral Elucidation of Structure.** 3 hrs. Prerequisite: Permission of the instructor. Applications of vibrational, electronic, nuclear magnetic resonance, and mass spectroscopy to structure determination.

505. **Problems in Chemistry.** 3-6 hrs. Prerequisite: Undergraduate coursework in the area and permission of the instructor. An intensive review of specialized areas in chemistry.

506. **Modern Chemical Problem Solving I.** 3 hrs. Prerequisite: Permission of instructor. Techniques of solving relevant problems relating to the quantitative aspects of chemical reactions.

507. **Modern Chemical Problem Solving II.** 3 hrs. Prerequisite: Permission of instructor. Solving problems relating to chemical dynamics, periodicity and bonding.

509. **Chemistry Laboratory Teaching.** 1 hr. Prerequisite: Permission of the instructor. Instruction and practice for teaching assistants in the academic chemistry laboratory.

+ 511. **Instrumental Analysis.** 4 hrs. Prerequisite: CHE 462. Theory and practice of instrumental methods of analysis; absorption spectroscopy, magnetic resonance, mass spectroscopy, electrometric methods and fundamental electronics. Includes three hours of laboratory per week.

521. **Biochemistry I.** 3 hrs. Prerequisite: 352. The properties of amino acids, proteins, carbohydrates, lipids, and nucleic acids; actions of enzymes and protein synthesis.

522. **Biochemistry II.** 3 hrs. Prerequisite: 521. Major metabolic pathways with emphasis on energy considerations and inter-relationships of the pathways.

526. **Introduction to Biochemistry.** 3 hrs. Prerequisite: CHE 462. A one semester survey course emphasizing the chemical principles of biochemistry.

+ 527-L. **Biochemistry Laboratory.** 1 hr. Corequisite: CHE 521 or CHE 526. An optional laboratory course to accompany CHE 521 or CHE 526.

+ 528-L. **Advanced Biochemistry Laboratory.** 1 hr. Prerequisite: CHE 527-L. Corequisite: CHE 522. A continuation of CHE 527-L.

531. **Inorganic Chemistry.** 4 hrs. Prerequisite: CHE 462. Models, concepts, bonding, structural and periodic trends. Includes 3 hours of laboratory per week.

532. **Descriptive Inorganic Chemistry.** 3 hrs. Prerequisite: CHE 531. Electronic states, transitions, and spectra, coordination chemistry, reaction kinetics, boron hydrides, other topics.

541. Application of Nuclear Techniques. 4 hrs. Prerequisite: CHE 462. Topics include radiation detection, shielding, handling, tracer methods and decay calculations. Includes 3 hours of laboratory per week.

551. Qualitative Organic Analysis. 4 hrs. Prerequisite: CHE 352. The systematic identification of pure organic compounds and the analysis of mixtures. Includes 6 hrs. of laboratory per week.

561. Physical Chemistry. 3 hrs. Prerequisite: CHE 352, PHY 202 and MAT 168 or 178. Corequisite: CHE 311. Chemical thermodynamics, kinetics, surface phenomena, quantum chemistry, symmetry, spectroscopy, and molecular structure.

+ **561-L. Laboratory for CHE 561.** 1 hr. A laboratory designed to accompany CHE 561. Concurrent registration in CHE 561 is required.

562. Physical Chemistry. 3 hrs. Prerequisite: CHE 561. A continuation of CHE 561.

+ **562-L. Laboratory for CHE 562.** 1 hr. A laboratory designed to accompany CHE 562. Concurrent registration in CHE 562 is required.

600. Chemical Safety in the Teaching Laboratory. 3 hrs. Prerequisite: Permission of the instructor. Application of the principles of chemical safety to the creation of a safe environment in high school and college science laboratories.

601. Introductory Structural Chemistry. 3 hrs. Prerequisite: Permission of the instructor. A study of symmetry including group theory and point group designation, stereochemistry, and the origin of spectra.

603. Introduction to Kinetics and Synthesis. 3 hrs. Prerequisite: Permission of the instructor. An introduction to kinetics, synthesis (a general approach to both inorganic and organic), and separations.

605. Chemical Analysis I. 2 hrs. Prerequisites: CHE 311 and CHE 352. Separation methods including chromatography and centrifugation. Includes three hours of laboratory per week.

606. Chemical Analysis II. 2 hrs. Prerequisites: CHE 311 and CHE 352. NMR, ESR, mass spectrometry and x-ray diffraction. Includes three hours of laboratory per week.

607. Chemical Analysis III. 2 hrs. Prerequisites: CHE 311 and CHE 352. IR, UV-visible, ORD, CD, AA spectroscopy, flame photometry and fluorimetry. Includes three hours of laboratory per week.

608. Chemical Analysis IV. 2 hrs. Prerequisites: CHE 311 and CHE 352. Radiochemical, electrochemical, electrophoretic and thermal analysis. Data handling. Includes three hours of laboratory per week.

609. Applied Descriptive Chemistry. 3 hrs. Prerequisite: Permission of the instructor. Principles of chemical periodicity applied to a laboratory based study of reactivity.

611. Advanced Analytical Chemistry. 3 hrs. Prerequisite: CHE 411 or permission of instructor. Sampling techniques, equilibria and activity, chemical and physical separations, and chemical methods of analysis.

612. Advanced Chemical Analysis. 3 hrs. Prerequisite: CHE 611. Chemical methods of analysis. Complexometric non-aqueous methods, kinetic effects, and recent advances.

621. Advanced Biochemistry. 3 hrs. Prerequisite: Permission of instructor. The inter-relationships of metabolic pathways with emphasis on control mechanisms.

651. Advanced Organic Chemistry. 3 hrs. Prerequisite: Successful completion of Organic Qualifying Examination or in special instances, permission of the instructor. The structure of organic compounds and its relationship to chemical bonding, stereochemistry, resonance, and reactivity.

652. Advanced Synthetic Organic Chemistry I. 3 hrs. Prerequisite: CHE 651. The synthesis of organic compounds emphasizing modern reagents and methods.

661. Advanced Physical Chemistry. 3 hrs. Prerequisite: Successful completion of Physical Chemistry Qualifying Examination, or in special instances, permission of the instructor. Molecular and thermodynamic basis for chemical phenomena. Emphasis: Applications of thermodynamics and statistical thermodynamics to chemical disciplines.

689. Chemistry Seminar. 1 hr.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs. Prerequisite: Consultation with and permission of major professor.

701. Chemical Applications of Combined Gas Chromatography/Mass Spectrometry/Data Systems. 3 hrs. Prerequisite: Permission of instructor. An introductory study of the GC/MS/DS technique and its utilization in chemical problem solving.

702. Photochemistry. 3 hrs. Prerequisite: CHE 651 or permission of instructor. An introduction to the physical and chemical properties of the excited state.

711. Analytical Spectroscopy. 3 hrs. Prerequisite: CHE 411. Quantitative determinations by I.R., visible, U.V., and x-ray spectroscopy techniques including atomic emission and absorption.

712. Advanced Chemical Instrumentation. 3 hrs. Prerequisite: Permission of instructor. The chemical, electrical, and physical problems encountered in automatic measurement and control instrumentation.

713. Analytical Separations. 3 hrs. Prerequisite: Permission of instructor. Gas, ion exchange, and thinlayer chromatography; precipitation and crystallization; zone refining and electromigration.

719. Current Topics in Analytical Chemistry. 3 hrs. Prerequisite: Permission of instructor. Current topics of interest such as electroanalytical chemistry, instrumentation, chemometrics, new spectroscopic methods, etc.

721. Proteins. 3 hrs. Prerequisite: CHE 521 or permission of instructor. Protein purification, methods of primary, secondary, and tertiary structure determinations, and the relationship between structure and biological activities.

722. Physical Biochemistry. 3 hrs. Prerequisite: CHE 521. Application of physical-chemical methods to the study of biological macromolecules.

723. Enzymes. 3 hrs. Prerequisite: CHE 521. Mechanisms of enzyme action, and the kinetics, regulation, and synthesis of enzymes.

725. Lipids. 3 hrs. Prerequisite: Permission of instructor. Study of the structure, functions, and metabolism of lipids.

726. Hormone Biochemistry. 3 hrs. Prerequisite: Permission of instructor. The structure, biosynthesis, secretion, regulation, and mode of action of hormones.

729. Current Topics in Biochemistry. 3 hrs. Prerequisite: Permission of instructor. Topics of current interest in biochemistry such as neurochemistry, plant molecular biochemistry, photosynthesis, aging, hormonal control.

734. Physical Methods of Inorganic Chemistry. 3 hrs. Prerequisite: CHE 631. An in-depth study of physical tools pertinent to inorganic chemistry and to interpretation of and limits of experimental results.

739. Current Topics in Inorganic Chemistry. 3 hrs. Prerequisite: Permission of instructor. Topics of current interest such as transition metal complexes, reaction mechanisms or physical methods.

741. Nuclear Chemistry. 4 hrs. Prerequisite: Permission of instructor. Topics: interactions of radiation with matter, nature of radioactivity, radioactive decay, radiation detection nuclear reactions, tracer applications. Includes 3 hrs. of laboratory per week.

751. Physical Organic Chemistry. 3 hrs. Prerequisite: CHE 651. Selected topics including application and use of quantum mechanics, kinetics, cryoscopy, isotopes, etc., to organic chemistry.

752. Mechanisms of Organic Reactions. 3 hrs. Prerequisite: CHE 651. Mechanisms of organic reactions with emphasis on stereochemistry, kinetics, thermodynamics, and new developments as reported in the chemical literature.

755. Chemistry of Liquid Crystals. 3 hrs. Prerequisite: CHE 651. Survey of the structure, synthesis, and properties of the liquid crystalline state.

759. Current Topics in Organic Chemistry. 3 hrs. Prerequisite: Permission of instructor. Topics of current interest in organic chemistry such as natural products, stereochemistry, novel synthetic methodology.

761. Special Topics in Statistical Thermodynamics. 3 hrs. Prerequisite: CHE 661 or permission of instructor. Statistical mechanical theory and techniques applied to calculations of thermodynamics properties. Topics: theory of liquids, real gas behavior, etc.

762. Structural Chemistry. 3 hrs. Prerequisites: CHE 601, 631, and 662. Theoretical examination of vibrational and rotational spectroscopy, NMR, ESR, and diffraction from the standpoint of elementary quantum mechanics and group theory.

763. Introduction to Quantum Chemistry. 3 hrs. Prerequisite: CHE 661 or permission of instructor. Development of quantum theory relating to energy levels and bonding in chemical systems.

764. Elements of Diffraction. 4 hrs. Scattering, phase relationships, and structural techniques via diffraction for gases, liquids, solutions, and solids. Includes 3 hours of laboratory per week.

769. Current Topics in Physical Chemistry. 3 hrs. Prerequisite: Permission of instructor. Topics of current interest in physical chemistry such as magnetic resonance, quantum theory, etc.

789. Chemistry Seminar. 1 hr.

791. Research in Chemistry. 1-16 hrs. Prerequisite: Approval of major instructor.

797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

811. Analytical Electrochemistry. 3 hrs. Prerequisite: Permission of instructor. Thermodynamics of electrochemistry, theoretical derivation of electrochemical techniques and applications thereof.

821. Biosynthetic Pathways. 3 hrs. Prerequisite: Permission of instructor. An in-depth study of selected metabolic pathways.

822. Nucleic Acid and Protein Synthesis. 3 hrs. Prerequisite: CHE 621 or permission of instructor. Protein and nucleic acid biosynthesis, with emphasis on biological control mechanisms.

831. Organometallic Compounds. 3 hrs. Prerequisites: CHE 631 and 651 or permission of instructor. The preparation, structure, physical properties and chemical reactions of compounds containing carbon-metal and carbon-metalloid bonds.

841. **Radiation Chemistry.** 3 hrs. Prerequisites: CHE 561 and permission of instructor. Interaction of radiation with matter. Topics: Radiation dosimetry, ions and excited molecules, ion-molecule reactions, free radicals.

851. **A Survey of Heterocyclic Chemistry.** 3 hrs. Prerequisite: CHE 651. Nomenclature, synthesis, and reactions of the more common heterocyclic system.

861. **Special Topics in Quantum Chemistry.** 3 hrs. Prerequisite: CHE 661. Topics of current interest in quantum chemistry such as magnetic resonance, electron spectroscopy, etc.

862. **Chemical Kinetics.** 3 hrs. Experimental techniques of measuring chemical reaction rates and the mathematical treatment of rate data.

863. **Surface Chemistry.** 3 hrs. Prerequisite: Permission of instructor. Surface phenomena: catalysis, absorption, ion exchange and electrical properties.

898. **Dissertation.** 12 hrs.

CHILD DEVELOPMENT (CD-805)

550. **Administration of Programs for Young Children.** 3 hrs. Prerequisite: 3 hrs. in Child Development. Evaluation of policies and procedures; organizational structure and management will be emphasized.

551. **Infant Development.** 3 hrs. Emphasis will be given to the development and behavior of the infant. Supervised experiences included.

552. **Child Development Methods and Materials.** 3 hrs. Provisions are made to evaluate and select materials for use in developing teaching techniques and planning play activities for children. Includes weekly laboratory experiences.

553. **Creative Activities for the Preschool Child.** 3 hrs. A study of creative activities for preschool children. Includes weekly laboratory experiences.

555. **Supervised Participation.** 6 hrs. Prerequisite: CD 452. Directed participation in programs for young children.

559. **Symposium in Child Development.** 3 hrs. May be repeated for a total 6 hours. Selected topics in Child Development.

598. **Families of the Developmentally Disabled.** 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

650. **Advanced Child Development.** 3 hrs. A study of the child through the preschool years, investigated in light of personality development theories and current research.

652. **Current Trends and Theories in the Field of Child Development.** 3 hrs. A survey of selected theories in Child Development and an examination of current problems and critical issues.

654. **Seminar in Child Development.** 3 hrs. May be repeated for a total of 6 hours. Selected topics in Child Development.

681. **Children at Risk.** 3 hrs. Topics related to biological and environmental contributions to development, factors deterring normal development, and legal ethical issues.

682. **Assessment of Handicapped Children 0-5.** 3 hrs. Training in methods of assessing cognitive, motor, language, neurological, and behavioral aspects of development.

683. **Intervention Procedures for Handicapped Children 0-5.** 3 hrs. Programming techniques and strategies for language, cognitive, social, self-help, and motor development.

691. **Research in Child Development.** 1-16 hrs.

692. **Special Problems in Child Development.** 1-4 hrs.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor

and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs.

CLOTHING AND TEXTILES (CT-810)

521. **International Fashion Study.** 2-9 hrs. Planned study of international fashion centers with emphasis on clothing, textiles, interiors, and merchandising. May be repeated up to 9 hrs.

530. **Textile Testing.** 3 hrs. Prerequisites: CT 330 and 334 or permission of instructor. Principles and methodology of textile product evaluation with experience in planning, writing, conducting and interpreting evaluation studies.

531. **Tailoring.** 3 hrs. Prerequisites: Basic construction skills. Principles and techniques of tailoring applied to a suit or coat.

532. **Textile Economics.** 3 hrs. Prerequisites: CT 330, 334, ECO 225 or 256. A study of problems which affect the consumer in production, distribution, and consumption of textiles and clothing items.

537. **Principles of Apparel Design and Production.** 3 hrs. Prerequisites: CT 332, CT 330 or 334, CT 331 or permission of the instructor. A study of the historical beginnings, the development and current methods used in the design and production of apparel and accessories. Lab emphasis is placed on fashion sketching.

630. **Textiles; Recent Development.** 3 hrs. Prerequisites: CT 330, 334. Review of product and research trends in the field of textiles.

631. **Seminar in Clothing and Textiles.** 3 hrs. Topics to be announced in advance. May be repeated once for a total of 6 hours.

633. **Flat Pattern Design.** 3 hrs. Prerequisite: Basic construction skills. Application of flat pattern design techniques to the creation of dress designs.

635. **Demonstration Techniques and Preparation of Teaching Materials in Clothing and Textiles.** 3 hrs. Prerequisite: Minimum of 9 credit hours of clothing and 3 credit hours of textiles, or permission of instructor.

637. **Apparel Designing Through Draping.** 3 hrs. Creating apparel designs on dress forms through the application of draping principles and procedures.

638. **Advanced Construction Techniques Applied to Tailoring Men's Apparel.** 3 hrs. Prerequisite: CT 333 or equivalent.

691. **Research in Textiles and Clothing.** 1-16 hrs.

692. **Special Problems in Clothing and Textiles.** 1-4 hrs.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

COACHING AND SPORTS ADMINISTRATION (CSA 710)

504. **Equipment and Facilities for Competitive Athletics.** 3 hrs. The planning and administration of facilities to include purchasing, care, and inventory of equipment.

505. **Governing Agencies for Competitive Athletics.** 3 hrs. An indepth study of the governing agencies related to the administration and control of athletic competition.

509. **Psychological and Sociological Aspects of Coaching.** 3 hrs. The analysis and study of human behavior patterns as they relate to athletics.

526. **Coaching Soccer.** 3 hrs. Fundamentals of coaching soccer as it relates to the selection of personnel, philosophy, skills, and proper training procedures.

570. **Assessment and Development of Athletic Attributes.** 3 hrs. The development and administering of strength, endurance, flexibility, reaction, speed, and agility programs.

571. **Practice Organization, Scouting, and Communication Techniques.** 3 hrs. Daily practice plans, scouting techniques, cinematography, instructional materials, techniques, and equipment for coaches.

575. **Medical Aspects of Athletic Training.** 3 hrs. Team physician and trainer relationships. Physical examination, emergency equipment, medical terminology, and problems related to the team physician.

577. **Seminar in Sports Medicine.** 1-3 hrs. A study of modern methods and techniques utilized in sports medicine as it relates to coaches, trainers, and team physicians.

599. **British Studies.** 3-6 hrs. Involves variable topics. Lectures and supervised research in England. Offered exclusively through the USM Institute of Anglo-American Studies.

670. **Administration of Athletics and Sports.** 3 hrs. Special emphasis on problems of the athletic director and coach in organizing and directing the athletic program through all levels of the educational structure.

671. **Special Athletic Problems-Football.** 3 hrs. Defining, analyzing, and solving specific athletic problems relating to the sport of football through study and research.

672. **Special Athletic Problems-Basketball.** 3 hrs. Defining, analyzing, and solving specific problems relating to the sport of basketball through study and research.

673. **Special Athletic Problems-Baseball.** 3 hrs. Defining, analyzing, and solving specific athletic problems relating to the sport of baseball through study and research.

674. **Special Athletic Problems-Track.** 3 hrs. Defining, analyzing, and solving specific athletic problems relating to the sport of track through study and research.

675. **Minor Sports.** 2 hrs. Defining, analyzing, and solving specific athletic problems relating to minor sports through study and research.

676. **Athletic Seminar.** 3 hrs. An indepth study and analysis to enhance professional growth in athletics as it relates to advanced skills and knowledge of coaching.

677. **Sports Administration Seminar.** 3 hrs. Continuation of CSA 676. Topics vary.

678. **Care and Treatment of Athletic Injuries.** 3 hrs. Techniques and facilities for adequate prevention and treatment of athletic injuries.

680. **Research Techniques.** 3 hrs. Discovery and recognition of problems, evaluation of problems and procedures, types and techniques of research.

698. **Thesis.** 1-6 hrs. For a total of 6 hours. Credit deferred until thesis completed.

796. **Practicum in Coaching and Sports Administration.** 1-6 hrs. Terminal field experience at an approved sports administration site.

COMMUNICATION (COM-208)

600. **Communication Theory and Research.** 3 hrs. A survey of major research traditions in the field of speech communication. Topics will include persuasion, nonverbal communication, networks, and theories of communication.

605. **Interpersonal Communication.** 3 hrs. A comparative approach to the study of interpersonal communication theories and methods.

609. **Communication Seminar.** 3 hrs. A rotating seminar that addresses topics in the three areas of Radio-TV-Film, Journalism, and Speech Communication.

610. Problems in Organizational Communication. 3 hrs. Analysis of work organizations as communication networks. Emphasis on identification, analysis of selected problems, consultation methods, and administration of communication training programs. Field project.

621. Seminar in Public Relations. 3 hrs. Course will examine various topics essential to public relations practitioners such as law, management, and public relations planning; will include lectures by practicing professionals in public relations.

625. Process and Effects of Mass Communication. 3 hrs. A study of the major areas of mass communication research literature, emphasizing mass communication effects research.

691. Research in Communication. 1-16 hrs. For independent reading projects of broad general nature. Normally limited to topics not covered in regular courses.

692. Special Problems. 3 hrs. For independent research projects designed to answer specific questions in applied or theoretical communication.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis in Public Address or Communication. 6 hrs.

699. British Studies: Comparative National Media Systems. 3-6 hrs. To instruct students through lectures, research, and field trips about the similarities and differences between the American and British media systems.

720. Introduction to Graduate Research in Communication. 3 hrs. Analysis of types of problems, concepts, variables, definitions, designs measurement techniques, and interpretation of data prevalent in communication research. Involves elementary statistics and development of research proposals and designs.

721. Content Analysis of Communication. 3 hrs. Study of theory and methods of defining, categorizing, coding, and interpreting verbal and non-verbal elements of the communication process. Emphasizes source and message elements. Elementary statistical analysis, research report, and design of studies.

722. Communication Research Methods. 3 hrs. A study of the techniques and strategies used in conducting empirical studies of communication. Topics will include measurement, sampling, and content analysis.

730. Theory and Research in Small Group Communication. 3 hrs. A study of human interaction in small group settings and the determinants and effects of such interaction.

747. International Communication Systems. 3 hrs. An overview of international communications: comparative broadcasting systems, international broadcasting, world press.

791. Research in Communication. 1-16 hrs. For independent reading projects of a broad general nature. Normally limited to topics not covered in regular courses.

792. Special Problems. 3 hrs. For independent research projects designed to answer specific questions in applied or theoretical communication.

797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using

other resources of the University must enroll in this course for at least 3 hours each semester.

809. Communication Seminar. 3 hrs. A rotating seminar that addresses topics in the three areas of Radio-TV-Film, Journalism, and Speech Communication.

862. Seminar in Mass Media Control and Ethics. 3 hrs. Alternate years. Problems and case studies concerned with regulation, deregulation, industry codes, and ethics.

898. Dissertation. 12 hrs.

Journalism (JOU-212)

505. Problems in Newspaper Production. 3 hrs. Practical training in the production of student newspapers and advising of staffs.

521. Public Relations. 3 hrs. Introduction to the professional practice of public relations, emphasizing its function and process, publics, tools and media of communications, and professional ethics.

522. Publicity Methods. 3 hrs. Concentrates on designing total public relations packages for public, business, and non-profit organizations. Requires production of a publicity campaign.

525. Business and Professional Publications. 3 hrs. Writing, editing, designing, and producing publications used in public relations communication with emphasis on magazines.

528. Public and Press Relations Management. 3 hrs. Emphasizes systematic analysis of clients and publics, formulation of goals and strategies, and multimedia communications. Evaluation of effectiveness and budget preparation included. Case studies and field project.

529. Internship in Public Relations. 3 hrs.

533. Problems and Cases in Advertising. 3 hrs. Prerequisite: Consent of instructor. The focus is upon problems, decisions, and decision-making processes of advertising managers with special emphasis upon decision-making across the functional areas of the advertising process.

552. Press and Society. 3 hrs. Study of the relationship between the press and the culture and institutions of society.

570. Newspaper Organization and Management. 3 hrs. Study of the interrelationships of the various departments in newspaper organizations of varying circulation sizes and management techniques used to direct their activities.

580. Seminar in Journalism. 3 hrs. Examination of theoretical concepts in Journalism and the setting for their application.

598. British Studies in Photography. 3-6 hrs. Lecture and research in British Photography offered abroad under the auspices of the Institute of Anglo-American Studies.

599. British Studies in Journalism. 3-6 hrs. Lecture and research in British Journalism offered abroad under the auspices of the Institute of Anglo-American Studies.

Radio-Television-Film (RTF-220)

507. Theories of Mass Communication. 3 hrs. An analysis of processes and effects of mass communication.

516. Telecommunication Media Management. 3 hrs. Examination of management responsibilities in broadcast radio and TV, cable TV, and other electronic media and media delivery systems.

525. Telecommunication Media Research. 3 hrs. Prepares students to utilize and evaluate professional telecommunication research services and to conduct elementary studies of media audiences.

531. **Advertising Management and Sales.** 3 hrs. Prerequisite: RTF 330. A continuation of RTF 330, with emphasis upon case studies in advertising management and sales.

547. **Television Production Workshop.** 2 hrs. Prerequisites: RTF 340 and 440 or permission of instructor. A flexible format course designed to serve the career objectives and needs of advanced students. The workshop may involve large or small group productions or individual projects, or some combinations.

548. **Seminar in Radio-TV.** 3 hrs. Seminar topics vary depending upon faculty member and expressed interests of students. Recent topics have included: (1) Television Criticism; and (2) Social Effects of the Mass Media.

560. **Issues in Telecommunication.** 3 hrs. Examination of structural, regulatory, policy, and social concerns related to the U.S. telecommunication industry.

574. **Techniques in Film Acting and Directing.** 3 hrs. A course designed for advanced film and acting students in the techniques of performing before the motion picture camera.

575. **Film Business Procedures and Management.** 3 hrs. Prerequisite: Consent of instructor. Study of the business practices and problems involved in film production.

576. **British Studies: The British Film.** 3-6 hrs.

577. **Advanced Film Production Workshop.** 3 hrs. Prerequisite: Consent of instructor. Students enrolled in this course will serve as director, cinematographer or film editor of a complete 16mm motion picture production.

578. **Seminar in Film.** 3 hrs. Seminar subjects vary. Past content has included the study of production management and labor relations, the experimental film, and the documentary film.

579. **French Cinema.** 3 hrs.

589. **Caribbean Mass Media Systems.** 3 hrs. Prerequisite: Consent of instructor. Lecture and research on the media systems of the Caribbean Basin with special attention given to coverage of Third World news.

692. **Special Problems in Radio, Television, and Film.** 1-3 hrs. Prerequisite: Consent of instructor. The student analyzes a problem area and proposes a special course arrangement with a faculty member. Problems range from television, film productions, writing scripts, to writing extensive research papers.

Speech Communication (SCM-216)

503. **Political Communication.** 3 hrs. A study of political communication and voter behavior in America. Taught only in the fall of election years so that the current campaign may be used as a case study. The course focuses on the political campaign as a specialized approach to mass persuasion.

505 **Relational Communication.** 3 hrs. Reviews the development of interpersonal processes that effect relationships in social, intimate, work, and family contexts.

510. **Organizational Communication I: Theory and Process.** 3 hrs. A survey of approaches to the study of organizational communication and aspects of the communication process within organizations.

511. **Managing the Forensics Program.** 3 hrs.

512. **Advanced Persuasion.** 3 hrs. This course extends the introductory course in persuasion. Specifically, it will familiarize students with theories, concepts, and issues in persuasion from classical to current times.

515. **Rhetorical Criticism.** 3 hrs. Discusses the variety of critical methods by which to analyze, interpret, and evaluate public communication. Emphasis on persuasive messages found in speeches, documents, film, and human behavior.

520. Organizational Communication II: Assessment and Training. 3 hrs. A survey of methods for determining the quality and kind of communication within organizations and training methods for improving organizational communication.

525. Organizational Communication III: Data Gathering and Analysis. 3 hrs. Methods of gathering and analyzing organizational communication data. Examines documents which measure and assess communication flow, climate, and style.

530. Communication and Small Group Decision-Making. 3 hrs. Examines theory, research, and practice concerning the role and importance of communication in task oriented groups. Special emphasis on decision-making.

535. Speech Communication in Legal Contexts. 3 hrs. Prerequisites: SCM 111, 303, 330 or instructor's permission. This course examines speech communication in legal contexts. Theoretical implications, research findings, and persuasive strategies used in various legal contexts are studied.

540. Health Communication. 3 hrs. Examines health communication theory and practices with attention given doctor-patient interactions in interpersonal, small group, interviewing, and organizational contexts.

550. Seminar in Speech Communication. 3 hrs.

560. Public Advocacy and Advanced Argumentation. 3 hrs. An extension of the introductory course in argumentation and debate. The course familiarizes students with advanced theories, issues, and concepts in public advocacy and argumentation.

575. Gender Issues in Speech Communication. 3 hrs. This seminar examines gender issues theory and research in interpersonal, professional, organizational, persuasive, and political communication.

590. Theories of Speech Communication. 3 hrs. A survey of theoretical perspectives on speech communication, e.g., psychological, rhetorical, linguistic, and human relations.

598. Teaching Public Speaking. 3 hrs. Provides instruction on how to teach public speaking. Emphasis on course assignments, grading, classroom management.

COMMUNITY HEALTH SCIENCES (CHS-750)

508. Health Education Methods. 3 hrs. A survey of teaching methods that are appropriate for health education program delivery.

509. Community Health Education Planning. 3 hrs. Diagnostic phases preceding program development, skills in planning, organization, and implementation of health education programs in the community.

510. School Health Education Planning. 3 hrs. Diagnostic phases preceding program development, skills in planning, organization, and implementation of school health education programs.

511. Health Education Curriculum Development. 3 hrs. Coordination of curriculum development, content selection, and scope and sequence.

512. Measurement and Evaluation in Health Education. 3 hrs. Instruments and techniques for measuring and evaluating personal health.

514. Consumer Health. 3 hrs. The importance of consumer education as related to advertising theory and methods, health misconceptions, health services, medical quackery and health products.

520. Communicable and Chronic Disease in Man. 3 hrs. Problems, control programs, and prevention of communicable and chronic disease.

522. Drugs and the Whole Person. 3 hrs. Psycho-social, medical, legal, and health aspects of drugs and their abuse.

525. Health Administration. 3 hrs. An introduction to health program administration including organization, financing, delivery systems, and manpower development.

526. **Health Education Concerns in Special Populations.** 3 hrs. Health education concerns of special risk groups such as the elderly, the poor, and minority groups.

527. **Health Policy.** 3 hrs. The role of the health educator in the development of public health policy, influencing social policy, and planning for social change.

530. **Marriage and Human Sexuality.** 3 hrs. Physical, emotional, and medical bases for successful courtship, marriage, and parenthood.

531. **Sexuality Education.** 3 hrs. Theory, methods, materials, for planning, organizing, and implementing sexuality in school and community settings.

532. **Introduction to Epidemiology.** 3 hrs. Concepts and methods of epidemiology as applied to a variety of health related problems.

537. **Health Education in Clinical Settings.** 3 hrs. Analysis of the role, methods and technology of Health Education pertaining to health care clinics and patient education.

538. **Workplace Health Promotion.** 3 hrs. Study of health education theory and practice as applied to occupational health.

550. **Health Peer Program.** 3 hrs. Open only to resident assistants. This course develops skills dealing with various health problems encountered in a dormitory.

590. **Special Topics.** 1-3 hrs.

599. **British Studies.** 3-6 hrs. Involves variable topics. Lectures and supervised research in England. Offered exclusively through the USM Institute of Anglo-American Studies.

601. **Introduction to Community Health Organization and Practice.** 3 hrs. An overview and orientation to the U.S. health delivery system with emphasis on community networks and programs.

611. **Internship in Community Health.** 3-9 hrs. Supervised professional experience in a selected community health setting.

622. **Epidemiology.** 3 hrs. A study of epidemiological concepts and methods related to incidence and prevalence of disease.

623. **Biostatistics.** 3 hrs. Prerequisite: one course in statistics. Application of statistics to public health data. Test include simple and complex, ANOVA, ANCOVA, and multiple regression.

640. **Traffic Systems Management.** 3 hrs. An overview of agencies and systems involved in the management of vehicular traffic.

641. **K-6 Safety Education.** 3 hrs. Development and implementation of comprehensive elementary safety program.

655. **Environmental Health.** 3 hrs. Basic knowledge and skills required to assess impact of the environmental hazard's on the nation's health.

656. **Social and Behavioral Aspects of Health.** 3 hrs. Social and behavior determinants of health, illness, and sick role.

657. **Financial Aspects of Health Care.** 3 hrs. An introduction to the financial aspects of health care in which payment systems, budgeting, and the application of quantitative information in health care finance is concerned.

680. **Research Techniques.** 3 hrs. Problems, evaluation of problems and procedures, types and techniques of research.

685. **Contemporary Issues in Health.** 3 hrs. Health education needs and a study of contemporary health problems as they relate to content and methodology in health education.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who

are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 3 or 6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

710. **Seminar.** 3 hrs.

711. **Advanced Personal and Community Hygiene.** 3 hrs. Intensive study in personal and community hygiene.

720. **Community Organization for Health Education.** 3 hrs. Communities and community organizations as they relate to health services and health education.

730. **Marriage and Parenthood Education.** 3 hrs. Marriage and family life and social adjustment problems of high school and college students.

744. **Behavioral Problems in Safety Programs.** 3 hrs. A study of behavioral, attitudinal, and motivational issues in a variety of safety programs.

745. **Safety Education.** 3 hrs. Methods and materials of safety education in public schools.

746. **Administration and Supervision of Safety Programs.** 3 hrs. Administration and supervision of governmental, industrial, agency, and community safety programs.

792. **Special Problems in Health.** 3 hrs.

COMPUTER ENGINEERING TECHNOLOGY (CET-325)

537. **Design of Microcomputer Systems.** 4 hrs. Prerequisites: CET 470, 470L. Microprocessor architecture and operation; semiconductor RAM; programmed hardware concepts.

570. **Digital Systems I.** 3 hrs. Prerequisite: Permission of instructor. Symbolic logic, Boolean algebra for descriptions and analysis of switching circuits, basic sequential circuits.

+ 570-L. **Digital Systems I Laboratory.** 1 hr. Corequisite CET 570.

571. **Digital Systems II.** 3 hrs. Prerequisite: CET 570. A study of control units, arithmetic units, memories, and microprogramming concepts.

+ 571-L. **Digital Systems II Laboratory.** 1 hr. Corequisite CET 571.

577. **Process Control Systems.** 3 hrs. Prerequisites: MAT 168 and CET 571. Use of the analog computer to solve engineering problems; process control systems.

578. **Digital Control Systems.** 3 hrs. Prerequisite: CET 571. Design of control systems incorporating a computer as an on-line element. Design of control algorithms and introduction to optimal control.

+ 578-L. **Digital Control Systems Laboratory.** 1 hr. Corequisite CET 578.

587. **Introduction to VLSI Systems Design.** 3 hrs. Prerequisites: CET 437, 474; ELT 211. MOS device fabrication; data-control flow, architecture and design of VLSI system controllers.

+ 672. **Digital Systems III.** 3 hrs. Prerequisite: CET 571. Fault detection in digital systems and fault tolerant computing.

COMPUTER SCIENCE AND STATISTICS (CSS-330)

+ 500. **Introduction to Computer Education.** 3 hrs. A practical, hands-on introduction to the instructional utility and administrative uses of computers in education. Cannot be used to satisfy any Computer Science MS requirements.

+ 501. **Computer Skills for Research.** 3 hrs. Prerequisite: CSS 240. Editing of data files, computer system utilization, use of BMD, SPSS, MINITAB for processing research data. Cannot be used to satisfy Computer Science MS requirements.

+ 502. **Structured Basic Programming.** 3 hrs. Prerequisite: CSS 500. Technical presentation of BASIC with scientific problem solving, algorithms and introduction to data structures. Cannot be used to satisfy Computer Science MS requirements.

+ 503. **Authoring Systems for Computer Based Learning.** 3 hrs. Prerequisite: CSS 500. Developing computer based instructional modules utilizing the authoring system approach. Cannot be used to satisfy Computer Science M.S. requirements.

504. **Functional Programming with LOGO.** 3 hrs. Prerequisite: CSS 500. An introduction to the functional style of programming using the LOGO programming language. This course cannot be used to satisfy any degree requirements in the College of Science and Technology.

515. **Methods of Mathematical Statistics I.** 3 hrs. Prerequisite: MAT 168. Continuous and discrete distribution, t-test, Chi-square test and analysis of variance.

516. **Methods of Mathematical Statistics II.** 3 hrs. Prerequisite: CSS 515. Orthogonal polynomial contrasts, multi-way classification anova, simple and multiple linear regression, polynomial regression.

518. **Sampling Methods.** 3 hrs. Prerequisite: CSS 515. The planning, execution and evaluation of sample surveys. Simple random sampling, stratified random sampling, cluster sampling.

+ 630. **Communications Engineering Fundamentals.** 3 hrs. Prerequisite: Permission of instructor. Basic concepts of components and systems which provide electrical communications. Does not apply to Computer Science degree.

+ 631. **Analog and Digital Communications.** 3 hrs. Prerequisite: CSS 630. Principles and techniques of analog and digital communications. Fourier analysis of various modulation and multiplexing methods. Does not apply to Computer Science degree.

+ 632. **Communication Systems Analysis.** 3 hrs. Prerequisite: CSS 631. Principles and techniques for analyzing the technical performance of voice and data communication systems. Does not apply to Computer Science degree.

+ 633. **The Computer and Communications.** 3 hrs. Prerequisite: CSS 632. The operation of and uses for digital computers in a communications context. Does not apply to Computer Science degree.

636. **Stochastic Processes and Queuing Theory.** 3 hrs. Prerequisite: MAT 385. Poisson process, Markov processes and Queuing theory.

+ 637. **Least Squares Techniques.** 3 hrs. Prerequisite: CSS 516. Regression analysis, curvilinear regression, discriminant and factor analysis.

COMPUTER SCIENCE (CSC-333)

616. **Automata, Computability, and Formal Languages.** 3 hrs. Prerequisite: CSC 415. Formal models of computation. Computability, complexity, languages.

+ 620. **Formal Methods in Programming Languages.** 3 hrs. Prerequisite: CSC 616. Data and control abstractions. Backtracking and nondeterminism. Functional and logic programming. Program specification and verification.

623. **Analytical Models for Operating Systems.** 3 hrs. Prerequisite: CSC 410. Examination of the major models that have been used to study operating systems and the computer systems which they manage. Petri nets, data flow diagrams, and other models of parallel behavior. Fundamentals of queueing theory.

624. **Computer Communication Networks and Distributed Processing.** 3 hrs. Prerequisite: CSC 623. Study of networks of interacting computers. Problems, rationales, and possible solutions for both distributed processing and distributed databases. Major national and international communication protocols will be presented.

626. **Advanced Computer Architecture.** 3 hrs. Prerequisite: CSC 410. Introduction to various architectures and techniques which have been developed or are proposed in

the literature. Pipelined architecture, dynamic system architecture, data flow architecture, array processing.

629. Applied Combinatorics and Graph Theory. 3 hrs. Prerequisite: CSC 616. Study of combinatorial and graphical techniques for complexity analysis including generating functions, recurrence relations, Polya's theory of counting, and NP complete problems.

+ **632. Artificial Intelligence.** 3 hrs. Prerequisites: CSC 412. Relatively unfocused, relatively focused, Heuristic, and probabilistic reasoning. Production rule systems. Knowledge-based and expert systems. Survey of current research.

633. Distributed Database Systems. 3 hrs. Prerequisite: CSC 623. A consideration of the problems and opportunities inherent in distributed databases on a network computer system. Includes file allocation, directory systems, mutual exclusion, deadlock detection and prevention, synchronization, query optimization, and fault tolerance.

634. Information Storage and Access. 3 hrs. Prerequisites: CSC 411. Advanced data structures, file structures, and databases, with an emphasis on specialized problem areas. Access and maintenance issues.

635. Computer Graphics. 3 hrs. Architecture of display systems, basic 2-D and 3-D mathematics, 3-D viewing and geometry, advanced surface mathematics, advanced architectures for raster and vector displays, hidden line and hidden surface problems, realistic imaging, software design for 3-D systems.

636. Modeling and Simulation. 3 hrs. A study of the construction of models which simulate real systems. Includes probability and distribution theory, statistical estimation and inference, the use of random variates, and validation procedures. A simulation language is used for the solution of typical problems.

+ **638. Advanced Computer Algorithms.** 3 hrs. Prerequisite: CSC 413. Study of recent advances in algorithm design and analysis.

+ **640. Mathematical Programming.** 3 hrs. Linear programming. Modeling, simplex method and modifications, duality. Networks and integer programming algorithms.

645. Expert Systems. 3 hrs. Prerequisite: CSC 632. Review of classical expert systems. Study of knowledge representation, acquisition and epistemology to formulate rule based systems. Study of inference engines using statistics, Bayes' Theorem, Heuristic Techniques.

690. Seminar in Computer Science. 1 hr.

691. Topics in Computer Science. 3 hrs. Special topics in Computer Science of current interest to faculty and students, e.g., Robotics, neural networks, pattern recognition. May be repeated for credit at discretion of academic adviser.

695. Directed Study. 1-3 hrs. Individual study by a student on an area or problem approved by the student's academic adviser.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. For a total of 6 hrs. Credit deferred until thesis is completed.

699. Project. 1-3 hrs. For a total of 3 hrs.

CONSTRUCTION ENGINEERING TECHNOLOGY (BCT-393)

578. Applications of Construction Law. 3 hrs. Analysis of construction law and the construction process; legal problems in the bidding process and in the performance of the contract.

592. **Special Problems.** 1-3 hrs. Prerequisites: Senior standing and approval of faculty adviser.

COOPERATIVE EDUCATION (CED-099)

+ 500. **Cooperative Education Work Term.** 0 hr.

**COUNSELING PSYCHOLOGY AND COUNSELOR EDUCATION
(CPY-140)**

513. **Multicultural Counseling.** 3 hrs. Examines cultural diversity in North American society with focus on implications for counselors and mental health service providers.

515. **Vocational Evaluation.** 3 hrs. Provides instruction in the concepts and skills comprising the process of vocational evaluation with emphasis on the use of work samples and the writing of prescriptive vocational reports.

523. **Group Procedures.** 3 hrs. The study of behavior in group settings with particular attention given to applications in mental health agencies and institutions.

525. **Vocational Evaluation Practicum.** 3 hrs. Supervised practicum in Administration Scoring and Interpretation of Work Sample Assessment.

530. **Principles and Processes of Case Management.** 3 hrs. The course focuses on the coordination of specific functional tasks associated with rehabilitation services.

531. **Medical Aspects of Rehabilitation.** 3 hrs. An introduction to the chronically disabling conditions both from the viewpoint of treatment processes and individual adjustment.

532. **Introduction to Community Resources.** 3 hrs. An orientation to the community structures within which various service agencies operate. Processes through which client services are organized provide a basis for survey of community helping resources.

533. **Workshop in Counseling Procedures.** 3 hrs. Topics of special interest to the field of counseling psychology are introduced including: behavioral orientations to counseling and therapy, brief therapy models and topics in marriage and family counseling/therapy.

536. **Behavioral Counseling.** 3 hrs. An introduction to behavioral counseling as a problem-solving, data-based, action-oriented approach to the achievement of client goals.

596. **Families of the Developmentally Disabled.** 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

597. **Interdisciplinary Seminar in Developmental Disabilities.** 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.

610. **Foundations, Organization, and Administration of Guidance.** 3 hrs. An introduction to counseling and guidance services at the elementary/secondary school levels. Attention is given to both the range of services typically offered and to principles for organizing and administering a program of guidance services.

611. **Career Development and Information Services.** 3 hrs. The introduction to theories of career development and an analysis of the world of work. Processes are identified through which occupational/educational and personal/social information may be integrated for career/life planning.

612. **Counseling Theories I.** 3 hrs. A course which provides an overview of major theoretical models for counseling. Attention is given to philosophical assumptions, key theoretical concepts, and major techniques of each.

614. **Testing and Individual Analysis.** 3 hrs. Prerequisite: REF 602 or equivalent. The fundamental principles of psychological assessment including concepts necessary for the administration, scoring, interpretation and use of test results. Attention is also given to ethics and issues involved in the appropriate use of psychological test results.

630. Introduction to Community and Counseling Psychology. 3 hrs. A survey course with particular emphasis on the role and identity of the psychological counselor in community agency and institutional settings.

640. Student Personnel Work in Higher Education. 3 hrs. An introduction to student personnel services in higher education.

650. Research Design. 3 hrs. Prerequisite: Introductory statistics. An overview of research design and methodology with an emphasis on problems in applied settings.

662. Counseling Lab Practicum. 3 hrs. Prerequisites: CPY 612, 614, and prior arrangement with instructor. Beginning clinical practicum in counseling and psychological services. Students are expected to acquire basic competencies in counseling, testing and implementation of a systematic plan for behavior change.

663. Supervised Field Practicum. 3 hrs. Prerequisite: CPY 662. An intermediate level field practicum.

691. Research. 1-16 hrs.

692. Special Problems I, II, III. 1-3 hrs. By prior arrangement only.

694. Field Problems I, II, III. 1-3 hrs. By prior arrangement only.

696. Field Internship. 3-6 hrs. Prerequisites: CPY 760 and prior arrangement with instructor. Affords opportunity for supervised practice in field setting.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

710. Group Counseling. 3 hrs. Introduction to theory and practice of group counseling. Requires participation in experiential quasi-group. Major theoretical models for group work are surveyed.

711. Theory and Practice of Consultation. 3 hrs. Introduction to the theory and process of consultation. Emphasis is placed on student acquisition of basic consulting skills/competencies.

712. Assessment and Diagnosis. 3 hrs. Prerequisite: CPY 614 or equivalent. An advanced course in psychological assessment and diagnosis. Attention is given to the selection and use of instruments commonly employed by counseling psychologists in clinical settings, and to diagnostic criteria of the DSM-III.

713. Counseling Theories II. 3 hrs. Prerequisite: CPY 612 or equivalent. An intermediate level course which provides a systematic analysis of major counseling theories with an emphasis on the integration of theoretical constructs with practice and contemporary research.

714. The Psychology of Vocational Development. 3 hrs. An advanced study of vocational development as a life process. Concepts from the psychology of vocational development are examined as a basis for implementing the scientist-practitioner model through career counseling.

720. Counseling Interventions with Children. 3 hrs. An introduction to specialized counseling interventions with children.

732. Marriage and Family Counseling. 3 hrs. A survey of marital and family therapy models. Attention is given to the application of systems models.

735. Behavioral Medicine. 3 hrs. Designed to acquaint students with concepts in behavioral medicine and to relate psychological methods to health enhancement and to the treatment and rehabilitation of patients with physical illness.

738. **Alcoholism and Drug Abuse Seminar.** 3 hrs. Advanced seminar in alcohol and drug abuse. Approximately one-half of the course is devoted to basic concepts, with the remainder devoted to selection and implementation of intervention strategies.

740. **Problems Seminar.** 3 hrs. An advanced seminar which is organized around problems and issues of college and university student personnel work.

750. **Research Practicum.** 3 hrs. Prerequisites: CPY 650 and permission of instructor. Supervised practicum in the design and conduct of research.

762. **Counseling Psychology Practicum I.** 3 hrs. Prerequisite: CPY 662 and prior arrangement with instructor. An intermediate-level clinical practicum in counseling and psychological services. Students are expected to acquire advanced competencies in counseling and case management and to demonstrate an integration of theory with practice.

763. **Group Counseling Practicum.** 3 hrs. Prerequisites: CPY 523 or 710 and permission of instructor. A practicum in which students facilitate and/or co-facilitate groups under supervision. Weekly staffings are scheduled with the supervisor to provide feedback and to allow discussion of problems and issues.

781. **Children at Risk.** 3 hrs. Topics related to biological and environmental contributions to development, factors deterring normal development, and legal ethical issues.

782. **Assessment of Handicapped Children 0-5.** 3 hrs. Training in methods of assessing cognitive, motor, language, neurological, and behavioral aspects of development.

783. **Intervention Procedures for Handicapped Children 0-5.** 3 hrs. Programming techniques and strategies for language, cognitive, social, self-help, and motor development.

784. **Transdisciplinary Seminar in Early Intervention.** 1 hr. Provides a common focus and directionality for students involved in the early intervention training program.

791. **Research.** 1-16 hrs.

792. **Special Problems.** 1-4 hrs.

794. **Field Problems.** 3 hrs.

796. **Advanced Practicum.** 3 hrs. An advanced field practicum in which students develop applied competencies appropriate to their area of specialization under the supervisor.

797. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

810. **Doctoral Integrative Seminar.** 1 hr. A weekly seminar designed to integrate instructional experiences of doctoral students during their first year of residency.

811. **Seminar in Systems of Counseling.** 3 hrs. Prerequisites: CPY 713 or equivalent and permission of instructor. A study of systems of counseling and psychotherapy with an emphasis on identifying central constructs and the development of synthesis. Students are expected to evaluate various systems in terms of their own developing theoretical positions.

835. **Behavioral Medicine Practicum.** 3-6 hrs. Prerequisites: CPY 735 and permission of instructor. Supervised practice of behavioral medicine in applied health care settings.

836. **Seminar in Counseling Psychology.** 3 hrs. A professional issues seminar offered to advanced students during their first term of enrollment in the doctoral program. Topics include: historical antecedents, current issues, ethics and standards for practice, training and credentialing in psychology.

840. **Externship.** 3-6 hrs. Prerequisite: Permission of instructor. Supervised experience in off-campus setting.

850. **Advanced Research Seminar.** 3 hrs. An advanced seminar which focuses on the identification of variables which are relevant to the understanding of psychotherapeutic change. Through a systematic review of process and outcome studies, students are assisted in conceptualizing and outlining their own program of doctoral research.

860. **Counseling Psychology Practicum II.** 1-3 hrs. Prerequisites: CPY 762 and prior arrangement with instructor. An advanced practicum in counseling and psychological services which is integrated with CPY 811, Seminar in Systems of Counseling. Students work under supervision with a caseload which assists them to relate relevant theoretical concepts to therapeutic problems posed by their clients.

861. **Internship I, II, III.** 3-9 hrs. By prior arrangement only. Doctoral internship in Counseling Psychology which is begun subsequent to completion of coursework and all doctoral examinations. Students enroll in three semester hours per term during the year (three terms) of fulltime internship.

870. **Practicum in Supervision.** 3-6 hrs. An advanced seminar in the supervision of others who deliver counseling psychological services. Students provide approximately fifteen hours per week of direct supervision to master's students and participate in weekly staffing sessions with their own faculty supervisor.

898. **Dissertation.** 12 hrs.

CRIMINAL JUSTICE (CJ-281)

520. **Methods of Criminal Justice Research and Planning.** 3 hrs. An indepth study of criminal justice planning, evaluation and research.

525. **Major Criminal Justice Theorists.** 3 hrs. Theories of criminal justice are traced from Aristotle's initial efforts to current Anglo-American applications.

526. **Comparative Criminal Justice Systems.** 3 hrs. A study of foreign criminal justice systems with emphasis on how they suggest possible reforms for the American system.

530. **Criminal Procedure.** 3 hrs. A survey of procedural criminal law. Due process, statute of limitation, venue, and double jeopardy are covered.

533. **Evidence, Search, and Seizure.** 3 hrs. An examination of laws of evidence and the procedures for obtaining it with special emphasis on application in criminal court.

540. **Police in the United States.** 3 hrs. A study of the policies and human issues affecting law enforcement agencies in the United States.

550. **Administration of Criminal Corrections.** 3 hrs. An in-depth study of administration of the correctional systems. To include: management, the incarceration process, probation, and parole.

551. **Probation, Parole, and Community Corrections.** 3 hrs. Course examines probation and parole systems, other alternatives to incarceration, and rehabilitative features available for offenders.

560. **Juvenile Justice System.** 3 hrs. A study of police in delinquency prevention, investigation of juvenile crime, disposition of offenders, and juvenile courts.

561. **Juvenile Corrections.** 3 hrs. Course provides the student interested in juvenile corrections with an in-depth perspective of the numerous treatment modalities currently in use.

562. **Comparative Juvenile Justice.** 3 hrs. A study of juvenile justice systems in other countries with emphasis on innovations which might provide useful guides to American practice.

563. Family Law. 3 hrs. An indepth study of common law and statutory law relating to the family emphasizing legal remedies to violence and its effects on the criminal justice system.

570. Political Economy of Criminal Justice. 3 hrs.

571. Victims of Crime. 3 hrs. Provides an in-depth study of factors that affect the victims of crime. Specific crimes are studied and remedies explored.

580. Seminar in Criminal Justice. 3 hrs. A seminar course dealing with all aspects of the criminal justice system, tying together the knowledge of criminal justice previously learned.

589. Caribbean Studies. 3 hrs. A comparative study of scriminal law, courts, and corrections through lectures, field exercises, and research.

598. British Studies: Comparative Criminal Jurisprudence. 3-6 hrs. A comparative study abroad of criminal law, courts, and procedures.

599. British Studies: Comparative Drug Law. 3-6 hrs. A comparative study of the instructional responses to drug abuse and related criminal offenses and an analysis of their differences.

625. Seminar in Criminal Justice Planning and Research. 3 hrs. Prerequisites: A basic statistics course or its equivalent and consent of instructor. A study of criminal justice planning methodology and research requirements.

630. Seminar in Civil Liberties and Criminal Law. 3 hrs. A study of the legal and moral responsibility of the criminal justice system to individual rights.

631. Seminar in Anglo-American Criminal Law and Procedure. 3 hrs. A detailed study of topics in English criminal law and procedure oriented toward understanding the basis of American criminal justice and solutions to common problems.

632. Civil Law and Criminal Justice. 3 hrs. Examination of the relationship between selected areas of civil law and criminal justice agencies.

640. Seminar in Legal Issues in Police Administration. 3 hrs. A study of legal issues involved in the administration of a modern police agency.

650. Seminar in Comparative Methods of Treatment in Corrections. 3 hrs. An analysis of comparative treatment methodologies utilized by correctional programs throughout the United States and in Europe.

660. Seminar in Juvenile Law. 3 hrs. Prerequisite: CJ 460/560 or approval of professor. An in-depth study of specific problems in the law pertaining to battered, neglected and delinquent children and their families.

692. Special Problems. 1-3 hrs.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs.

699. Seminar in Advanced Topics in Comparative Criminal Justice. 3 hrs. Prerequisite: CJ 426/526 or approval of professor. Study abroad of selected topics of foreign criminal justice systems. Emphasis is on theory.

CURRICULUM AND INSTRUCTION: ELEMENTARY (CIE-115)

503. **Kindergarten-Primary Education.** 3 hrs. A practicum designed to give teaching experiences in understanding the social, emotional, and cognitive growth and development of children.

512. **Diagnosis and Remediation of Reading Disability for the Classroom Teacher.** 3 hrs. Prerequisites: CIE 306 and 309. Provides relevant practicum experiences in evaluation and gives extended opportunities in child tutoring appropriate to grades 2-8.

540. **Supervision for Effective Student Teaching.** 1 hr. Introduction to the University of Southern Mississippi's student teaching program and the roles and responsibilities of associated personnel.

542. **Computational Errors in Elementary Mathematics.** 1 hr. The identification and remediation of pupil errors in addition, subtraction, multiplication, and division of whole numbers.

591. **The Reading Conference.** 3 hrs. An intensive program consisting of lectures, group discussion and demonstration lessons. Only three hours may be used for degree purposes.

594. **Workshop in Learning Resources in Early Childhood Education.** 3 hrs. Students will become acquainted with learning sources, selection, use and production of multimedia materials for kindergarten and primary education.

595. **British Studies in Early Childhood Education.** 3-6 hrs. Compares and contrasts the philosophies and current trends of American and British early childhood education.

598. **Families of the Developmentally Disabled.** 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

599. **British Studies: Studies in British Education.** 3-6 hrs. Three hours of lectures dealing with education in British education.

600. **Curriculum Development and Teaching Approaches in Multicultural Education.** 3 hrs. Provides an introduction to multicultural education with emphasis on curriculum development and teaching techniques.

602. **Procedural Errors in Mathematics.** 3 hrs. A workshop in the identification and remediation of procedural errors in the basic operations of elementary school arithmetic.

606. **Teaching Language Arts in the Elementary Grades.** 3 hrs. The basic concepts of language teaching and learning with consideration of all the language arts and their interrelationships.

615. **Student Discipline Techniques and Procedures for Teachers and Administrators.** 3 hrs. Provides a comprehensive overview of strategies for disciplining students.

616. **Teacher/Administrator Legal Rights and Responsibilities.** 3 hrs. Provides a comprehensive overview of the legal rights and responsibilities for teachers and administrators.

622. **Supervision and Curriculum in Reading.** 3 hrs. The role of reading supervisors and school administrators in developing and implementing programs for improvement of reading instruction in the schools.

691. **Research in Reading.** 1-16 hrs. Designed to provide a student with the opportunity to pursue an individual research project or to make an intensive review of reading research on a selected topic.

692. **Special Problems I, II, III.** 1 hr. A problem study to be approved by the department chairman to develop knowledge and facility in a field of interest of the student. Preparation of a scholarly paper is required.

694. **Field Problems in Production I, II.** 3 hrs. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 3 hrs. Credit deferred until thesis is completed.

704. **Reading for Different Cultural Groups.** 3 hrs. Reviews the research relating to the culturally different, specifically relating to characteristic differences and effective teaching materials and methodologies.

705. **Modern Concepts in Reading Skill Development.** 3 hrs. An intensive development of the skills required in classroom reading emphasizing methods and materials required to teach the skills.

706. **Psychology of Reading.** 3 hrs. Considers the components of the reading process, with emphasis on language and reading approached from a theoretical point of view.

713. **Advanced Diagnosis and Remediation of Reading Disability for the Classroom Teacher.** 3 hrs. Prerequisite: CIE 706. Deals with corrective and remedial reading in the elementary school covering causes of disability, procedures in diagnosis, and classroom remedial treatment.

715. **Advanced Diagnosis and Remediation of Reading Disability for the Reading Specialist.** 3 hrs. Prerequisite: CIE 706. Deals with the role of the reading specialist, reading clinic organization, diagnostic remedial materials and techniques, with limited testing-teaching and clinical observation experiences.

717. **Professional Relationship in Improved Elementary Programs.** 3 hrs. A course designed to investigate behavioral factors and individuals and groups as they affect elementary school environments.

720. **Internship in Reading: Public School.** 3-6 hrs. The student is assigned to a public school in a teaching or supervisory capacity under the direct supervision of a reading faculty member in order to develop competency in instruction, administration or clinical skills.

721. **Practicum in Remedial Reading for the Reading Specialist.** 3 hrs. Prerequisite: CIE 715. Provides supervisory experiences in diagnosis in prescribing materials for remediation and in directing remedial reading procedures for small groups of reading disability cases.

724. **Problems of Teaching Mathematics.** 3 hrs. Prerequisite: MAT 310 or consent of instructor. A study of elementary school techniques, particularly those related to a number concept, of teaching arithmetic based on research studies and current practices.

725. **Social Studies Education in Elementary School.** 3 hrs. A course which deals with programs, practices, trends, and investigation of criteria for evaluating, planning, organizing, and improving social studies programs.

726. **The Development of the Latin Countries.** 3 hrs. A seminar which deals with the historical, political, social, and economic development of the Latin American region.

727. **Diagnostic Techniques in Elementary Mathematics.** 3 hrs. Varied data sources which serve the diagnostic teaching cycle are investigated.

728. **Curriculum in the Elementary School.** 3 hrs. A course involving analysis and evaluation of curriculum elements and procedures in terms of the implications for the individual, the school, and the community.

729. Reading in the Elementary School. 3 hrs. Provides for extensive study of recent trends in materials and methods in reading in the elementary school including significant related research studies.

730. Practicum in Elementary Mathematics. 3 hours. Prerequisites: CIE 724 and 727, or permission of the instructor. Provides experience in the diagnosis and developmental instruction of elementary pupils and explores related materials.

733. Practicum in Diagnosis and Remediation of Reading Disability for the Classroom Teacher. 3 hrs. Prerequisite: CIE 713. Develops the skills necessary in making a complete reading diagnosis including evaluations, interpretations, and recommendations.

736. Practicum in Reading Diagnosis. 3 hrs. Prerequisite: CIE 713. Enables the student to work with small groups of corrective reading cases diagnosing needs and teaching corrective lessons.

753. Instructional Management. 3 hrs. Designed to help school districts develop and manage their educational program through clear instructional objectives and matching test items.

756. Developing Community Education. 3 hrs. A course designed to acquaint teachers with the concept of community education and its impact on their role in the classroom through strengthening community ties.

762. Research in Elementary Education. 3 hrs. Prerequisite: Advanced graduate status or permission of chairman of department. Designed to familiarize the student with the elements and methods of research, with the representative types of research, and with the major contributions of research to the field of elementary education.

768. Children's Literature in the Curriculum for the Early Years: An Awareness, Criteria, and Evaluation. 3 hrs.

770. Practicum in Early Childhood Education. 3 hrs. Curriculum planning, administration, and supervision are stressed through research and practice in laboratory settings.

772. Practicum with Parents. 3 hrs. Parent-teacher-child intrapersonal and interpersonal relationships are investigated through research and practice in laboratory settings.

776. Seminar in Early Childhood Education. 3 hrs. Emphasis is on early childhood practice, theory, and research and their relatedness to psychological, sociological, and intellectual patterns.

777. Evaluation in Early Childhood Education. 3 hrs. An introduction to specific principles and practices relative to group and individual evaluation procedures for early childhood education.

778. Creative and Mental Growth. 3 hrs. Research in creative thinking and its relationship to mental growth is emphasized.

780. Research in Child Development. 3 hrs. A course concerning methods and research in child growth in social, emotional, psychological, and physiological development.

782. History and Philosophy of Early Childhood Education. 3 hrs. An investigation of Pestalozzi, Froebel, Montessori, and others representing philosophies influencing today's curricula and programs.

785. Seminar in Reading Instruction. 3 hrs. Prerequisites: CIE 705, CIE 706, CIE 729. Considers topics pertinent to current research in reading instructions. Topics announced in advance of registration.

791. Research in Elementary Education. 1-16 hrs. Prerequisite: Approval of the major professor.

792. Special Problems. 3 hrs.

794. Field Problems. 3 hrs. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.

797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

798. Specialist Thesis. 6 hrs. Specialist's degree candidates are required to select a significant educational problem for investigation and to present the findings in a scholarly report under the guidance of a graduate committee.

862. Seminar in Elementary Education. 3 hrs. Prerequisite: Advanced graduate status or permission of the chairman of the department. A course which is interdisciplinary in nature and focuses upon contributions of research, philosophy, history, sociology, and educational psychology as it applies to the resolution of major issues in elementary education.

880. Advanced Graduate Seminar in Education. 1 hr. A series of in-depth discussions and analyses of significant educational problems and issues for students in advanced programs.

898. Dissertation. 12 hrs.

CURRICULUM AND INSTRUCTION: SECONDARY (CIS 120)

540. Supervision for Effective Student Teaching. 1 hr. Introduction to the University of Southern Mississippi's student teaching program and the roles and responsibilities of associated personnel.

541. Foundations of Reading Instruction for the Adult. 3 hrs. This course involves an examination of the basis of reading instruction for the nonliterate adult.

542. Methods and Materials for Teaching Adults to Read. 3 hrs. Instructional and diagnostic materials and methods for dealing with functionally illiterate adults.

570. Curriculum in the Secondary School. 2 hrs. A course which examines the present-day structure and nature of the secondary school curriculum.

598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

599. British Studies: Studies in British Education. 3 hrs. Three hours of lectures dealing with education in British education.

600. Curriculum Development and Teaching Approaches in Multicultural Education. 3 hrs. Provides an introduction to multicultural education with emphasis on curriculum development and teaching techniques.

615. Student Discipline Techniques and Procedures for Teachers and Administrators. 3 hrs. Provides a comprehensive overview of strategies for disciplining students.

616. Teacher/Administrator Legal Rights and Responsibilities. 3 hrs. Provides a comprehensive overview of the legal rights and responsibilities for teachers and administrators.

692. Special Problems I, II, III, 1 hr. A problem study to be approved by the department chairman to develop knowledge and facility in the field of interest of the student. Preparation of a scholarly paper is required.

694. Field Problems. 3 hrs. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 3 hrs. Credit deferred until thesis is completed.

700. Seminar in Secondary Education. 3 hrs. An investigation of the major trends and objectives of the secondary school with emphasis upon the disciplinary areas of the curriculum.

701. Algebra for Secondary Teachers. 3 hrs. Consideration is given to the problems relating to the teaching of algebra and a new review of special algebraic principles.

705. Professional Subject Matter in Mathematics. 3 hrs. A study of ways to enrich the teaching of high school mathematics through the introduction of basic topics and concepts of college mathematics.

706. Geometry for Secondary Teachers. 3 hrs. Consideration is given to the problems pertaining to the teaching of high school geometry and a review of special geometric principles.

707. Materials in the Teaching of Mathematics. 3 hrs. A study of materials to be used in the teaching of secondary school mathematics both in the classroom and in extraclass activities.

708. High School Curriculum. 3 hrs. An overview of the field of curriculum and instruction at the secondary-school level with special emphasis upon contemporary trends.

710. Mathematics for Junior High School Teachers. 3 hrs. Prerequisite: To be teaching junior high school mathematics or have at least a minor in college mathematics. Consideration is given to the problems relative to the teaching of mathematics in grades 7, 8 and 9 and to the organization of mathematical subject matter for these grades.

723. Research and Problems in Mathematics Education. 3 hrs. A seminar for experienced teachers who wish to plan developmental programs of mathematics instruction in light of recent developments.

730. Reading and Study Improvement Techniques for the Junior and Senior College Teacher of Reading. 3 hrs. Summarizes research, methods, and techniques of college reading programs including a practicum or internship experience in REF 334.

737. Practicum in Remedial Reading Instruction. 3 hrs. Provides the student experiences in secondary reading diagnosis and remediation with emphasis on techniques in a practicum setting.

750. Advanced Study of Problems and Issues in Teaching Secondary School Social Studies. 3 hrs. Explores inquiry strategies for the social studies classroom and seeks to foster a firm understanding of basic analytical concepts and principles for the experienced social studies teacher.

753. Instructional Management. 3 hrs. Designed to help school districts develop and manage their educational program through clear instructional objectives and matching test items.

754. Reading in the Secondary Schools. 3 hrs. A course providing for extensive study of trends in materials and methods in secondary school reading including significant research studies which relate to these.

756. Developing Community Education. 3 hrs. A course designed to acquaint teachers with the concept of community education and its impact on their role in the classroom through strengthening community ties.

791. Research in Secondary Education. 1-16 hrs. Prerequisite: Approval of the major professor.

792. **Special Problems.** 3 hrs.

794. **Field Problems.** 3 hrs. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.

797. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

798. **Specialist Thesis.** 6 hrs. Specialist degree candidates are required to select a significant educational problem for investigation and to present the findings in a scholarly paper under the guidance of a graduate committee.

880. **Advanced Graduate Seminar in Education.** 1 hr. A series of in-depth discussions and analyses of significant educational problems and issues for students in advanced programs.

898. **Dissertation.** 12 hrs.

DANCE (DAN-687)

553. **Advanced Jazz.** 2 hrs. The study and application of the principles of jazz movement. May be repeated for a total of six (6) hours.

568. **Musical Theatre Dance.** 2 hrs.

587-L. **Practicum in Movement.** 1-3 hrs. May be taken for a total of 9 hrs.

599. **British Studies.** 3-6 hrs. Studies in dance and movement sciences abroad (5 weeks).

ECONOMIC DEVELOPMENT (ED-265)

551. **Theories of Economic Location.** 3 hrs. Principals of economic location analysis with emphasis on locational decision-making and investment by different types of businesses. Relevance to economic development is stressed.

651. **Methods of Economic Development Research.** 3 hrs. Prerequisite: Consent of instructor. Examines research methods for local, regional, and state economic development agencies.

652. **Contemporary Issues in Economic Development.** 1-3 hrs. variable credit. May be repeated for a total of 9 hrs. Examines critical issues facing economic developers with a focus on policy formulation in the Southeastern U.S.

653. **Dynamics of Economic Development.** 3 hrs. Theory and practice of spatial aspects of economic development as applied to local, regional, and national economies and to the world market economy.

654. **Preparing for Community Economic Development.** 3 hrs. Provides practical instruction in the operation of a local economic development agency with emphasis on community preparation techniques and concepts.

655. **Economic Development Finance.** 3 hrs. Overview of financing principles for managing a local economic development organization, evaluating strategic development plans and specific projects, and coordinating industrial development incentive packages.

656. **Rural Economic Development.** 3 hrs. Focuses on rural development problems with emphasis on the Southeastern U.S.; examines national and state policies and practices for stimulating nonmetropolitan development.

657. **Promoting Community Economic Development.** 3 hrs. Provides practical instruction in concepts and techniques for promoting a community, region, or state for new and existing business investments.

658. **Applied Research Problems in Economic Development.** 3 hrs. Group or individual research on an actual economic development project.

691. **Internship.** 1-9 hrs. May be repeated for a total of 9 hours. Involves placement in an economic development agency and participation in actual agency activities.

692. **Special Problems.** 1-6 hrs. May be repeated for a total of 6 hours. Involves study in a specific topic or work in a specific area of research under the direction of a consulting faculty member.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hours. Independent research project initiated, designed, researched, and written by the student under the supervision of a major professor and a thesis committee.

ECONOMICS (ECO-610)

501. **Public Finance.** 3 hrs. Prerequisites: ECO 225-256. A study of federal and state spending and fund raising policies within the context of the social goals to be accomplished by such policies.

520. **Managerial Economics.** 3 hrs. Prerequisites: Computer literacy, calculus. An examination of micro-economic theory as applied to managerial decision making.

540. **Economic Development.** 3 hrs. Prerequisites: ECO 255-256. A study of the nature, causes, and effects of regional and national economic development.

550. **Introduction to Econometric Methods.** 3 hrs. Prerequisites: ECO 301 and 302. Specification, estimation, and interpretation of econometric models.

570. **Comparative Economic Systems.** 3 hrs. Prerequisites: ECO 255-256. Origins, development and characteristics of facism, communism, and capitalism.

598. **International Economics Seminar Abroad.** 3 hrs. Prerequisite: Consent of Program Director. Conducted in London, England: a series of lectures and discussions involving authorities on international economic issues and practices.

606. **Microeconomic Analysis for Business.** 3 hrs. Prerequisites: ECO 255-256, or ECO 520. A study of pricing and resource allocation with emphasis on applying microeconomic concepts.

610. **Monetary Theory.** 3 hrs. Prerequisite: ECO 330. An advanced study of the determination of the level of prices and of alternate monetary and fiscal policies.

672. **International Trade and Finance.** 3 hrs. Prerequisites: ECO 255 and 256, FIN 389, and consent of the instructor. A study of international trade theory, balance of payments adjustment mechanisms, exchange rate determination, and the role of the MNC in the international economy.

692. **Special Problems.** 3 hrs.

699. **International Economics Research Abroad.** 3 hrs. Prerequisite: Consent of Program Director. A research course in international economics required for any student enrolled in ECO 598.

EDUCATIONAL ADMINISTRATION (EDA-130)

540. **Community Education and the Professional Educator.** 1 hr. Introduction to the concept of community education and its importance in building a base of community support for schools.

598. **British Studies: Studies in British Education.** 3 hrs. Provides students with information on various topics related to British education and with field experiences related to British educational institutions.

599. **British Studies: Research in British Education.** 3-6 hrs. To provide students with supervised research study on British education that relates to their interests or educational specialty.

600. **Basic Course in Educational Administration and Supervision.** 3 hrs. The introductory course for teachers and prospective administrators provides an overview of administrative roles in education.

601. **Introduction to Community Education.** 3 hrs. Designed to acquaint students with the historical development of community education, and to review the basic components of the community school.

615. **Student Discipline Techniques and Procedures for Teachers and Administrators.** 3 hrs. Provides a comprehensive overview of strategies for discipling students.

616. **Teacher/Administrator Legal Rights and Responsibilities.** 3 hrs. Provides a comprehensive overview of the legal rights and responsibilities for teachers and administrators.

620. **Supervision of Instruction.** 3 hrs. A practical course in supervision for prospective school principals and supervisors of instruction. Deals with principles and procedures of supervision.

630. **Organization and Administration of the Elementary School.** 3 hrs. A study emphasizing administrative problems and professional leadership in the elementary school.

632. **Organization and Administration of the Junior High and Middle Schools.** 3 hrs. Examines the Junior High-Middle School function, objectives and program from the viewpoint of the administrator and supervisor.

634. **Organization and Administration of the Secondary School.** 3 hrs. The study of practical problems encountered by high-school principals in: scheduling, attendance, discipline, office management, and the selection and supervision of staff.

650. **School Business Management.** 3 hrs. A practical course in the overall aspects of present day school business administration.

691. **Research.** 1-16 hrs. arr.

692. **Special Problems I, II, III.** 1-3 hrs. A problem study to develop knowledge and facility in a field of interest for the student which requires preparation of a scholarly paper under the supervision of a graduate professor.

694. **Field Problems in Production I and II.** 3 hrs. Opportunity to study local school problems under careful supervision of a graduate professor.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

700. **Public School Finance.** 3 hrs. Emphasizes principles of taxation; local, state, and federal financing of public education; equalization of education opportunity.

701. **Analysis of Teaching Behavior.** 3 hrs. Designed to analyze teaching behavior to determine competency, including interaction analysis and microteaching skills.

704. **School Community Relations.** 3 hrs. A study of school community relations purposes, principles, policies, and procedures.

706. Education Facilities Development and Management. 3 hrs. A comprehensive study of the administrative function in facilities, renovation, planning, maintenance, and management.

708. Administration of School Personnel. 3 hrs. Stresses administrative relationships involved in developing satisfactory personnel policies, techniques, and regulations.

710. School Law. 3 hrs. Legal aspects of such factors as school money, church-state relationships, injury to pupils, student and teacher rights, and related matters.

711. Higher Education in the United States. 3 hrs. This course provides an overview of the development, scope, philosophy, objectives, and recent innovations in colleges and universities.

712. The Community/Junior College. 3 hrs. This course treats the development, functions, programs, philosophy, issues, and research related to the two-year college.

713. Curricula in Higher Education. 3 hrs. A study of undergraduate, graduate, and professional education curriculum development in community/junior and senior colleges.

715. Administration and Supervision of College Teaching. 3 hrs. A study of the administration of college faculty personnel services and of techniques for faculty development.

717. Continuing Education and Community Service. 3 hrs. The role and scope of continuing education and community service in higher education, including the community college.

719. Organization and Administration of Occupational Education in the Community College. 3 hrs. Economic, social, educational and legal bases for occupational education; administration of secondary and community college programs.

720. Advanced Curriculum Development. 3 hrs. Designed for the school administrator who has or will have responsibility for curriculum development in a school system.

730. Media Skills for Successful School-Community Relations. 3 hrs. Designed to build communication skills needed for a successful school-community relations program.

736. Practicum in Educational Administration. 3 hrs. Seminar-experiences in administrative problems from the standpoint of the chief school officer and the central office staff.

738. Practicum in Supervision. 3 hrs. Prerequisite: EDA 620. An advanced seminar in supervisory services and current problems from a central office viewpoint.

740. Advanced Instructional Supervision. 3 hrs. Designed to develop a systematic approach to instructional improvement that will be of use to the generalist or specialist. Prerequisites: EDA 600 and EDA 620.

742. Consensus Decision-Making in Education. 3 hrs. Designed to help school administrators improve their skills in using faculty and community groups in educational decision-making.

750. Administrative Workshop I, II, III, and IV. One and one-half hours per week. (Course may be repeated, with only nine hours counting toward a degree.)

753. Evaluating Instructional Management. 3 hrs. Provides strategies for assessing instructional management practices.

755. Problems of the County Superintendent. 3 hrs. A course designed for county superintendents in which they study their problems under the direction of a graduate professor.

756. Developing Community Education. 3 hrs. Designed to acquaint educators and agency representatives with the concept of community education and how it builds a strong base of community support for the schools.

780. Educational Leadership Seminar. 3 hrs. The nature and roles of leadership in educational settings with emphasis on self assessment and leadership style in educational decision making.

791. Research in Educational Administration, Supervision, and Curriculum. 1-16 hrs. Prerequisite: Approval of the major professor.

792. Special Problems. 3 hrs.

794. Field Problems in Administration I, II, III. 1 hr. A project dealing with a specific problem in school administration. An on-the-job training program with the work being done under the supervision of a graduate professor. This registration must be approved by the departmental chairman upon the recommendation of the student's major professor.

797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

798. Specialist Thesis. 6 hrs. Selection of practical educational problems for solution by candidates for the specialist's degree, using research and professional knowledge. A scholarly report is required.

800. Seminar: Theories in Educational Organization and Administration. 3 hrs. This course deals with the theories and concepts underlying present day school organization, administration, and supervision.

814. Organization and Administration of Higher Education. 3 hrs. A study of organizational and administrative roles of structure, governance, coordination, control and finance of higher education.

816. Seminar in Problems of Higher Education. 3 hrs. Discussion of problems and topics in higher education to be determined by the students and the instructor.

889. Special Topics Seminar. 1 hr. (Max. 3 hrs.) A seminar for inresidence doctoral students in educational administration, emphasizing current issues selected by students in consultation with faculty.

898. Dissertation. 12 hrs.

ELECTRONICS ENGINEERING TECHNOLOGY (ELT-398)

+ 511. Electronics for Scientists. 4 hrs. Practical electronics needed for maximum utilization of scientific instrumentation, automation, and logic circuits.

570. Introduction to Control Systems. 3 hrs. Prerequisites: ELT 412 or consent of Instructor. General control systems theory with application to automated manufacturing systems.

592. Special Problems. 1-3 hrs. Supervised study in area of electronics engineering technology related to manufacturing.

ENGLISH (ENG-224)

501. Advanced Grammar. 3 hrs. Introduces structural and transformational grammar. (Required for secondary or middle-grade certification in English.)

503. Introduction to Linguistics. 3 hrs. Introduces the principles of descriptive linguistics.

506. History of the English Language. 3 hrs. Surveys the development of the English language from Old English to the present.

508. Studies in Theoretical Linguistics. 3 hrs. Topics include syntax, phonology, semantics, lexicology.

509. Studies in Applied Linguistics. 3 hrs. Topics include field methods, varieties of English, psycholinguistics, sociolinguistics.

510. Survey of Readings in World Literature I. 3 hrs. Examines various Greek, Roman, Medieval, and Renaissance writers.

511. Survey of Readings in World Literature II. 3 hrs. Examines various European Enlightenment, Romantic, and Modern writers.

513. Survey of the Modern Novel. 3 hrs. Examines major British and Continental novels of the last hundred years.

515. Survey of Modern Poetry. 3 hrs. Acquaints students with the work of the significant modern poets, as well as the modern period's important poetic innovations and movements.

517. Survey of Modern Drama. 3 hrs. Studies important British and Continental dramas of the twentieth century.

519. Studies in World Literature. 3 hrs. Studies Continental, British, and American writers of the nineteenth and twentieth centuries. Repeatable to nine hours.

521. Fiction Writing III. 3 hrs. Prerequisites: Graduate standing, permission of the instructor, and enrollment in Center for Writers. Provides an opportunity to develop techniques of fiction writing. Repeatable to nine hours.

522. Poetry Writing III. 3 hrs. Prerequisites: Graduate standing, permission of the instructor, and enrollment in Center for Writers. Provides an opportunity to develop techniques of poetry writing. Repeatable to nine hours.

525. Readings in the Theory of Fiction. 3 hrs. Studies theories and forms of contemporary fiction. Repeatable to six hours.

526. Readings in the Theory of Poetry. 3 hrs. Studies theories and forms of contemporary poetry. Repeatable to six hours.

533. Advanced Technical Writing. 3 hrs. An advanced course in technical writing in which students prepare three or four assignments related to a single research problem.

540. Literary Criticism. 3 hrs. Provides a historical approach to the study of literary criticism from the classical period to the present. Emphasis will be on major texts and major critics.

551. Chaucer. 3 hrs. Emphasizes a close reading of *The Canterbury Tales*.

554. Shakespeare's Comedies and Tragicomedies. 3 hrs. Studies a selected group of Shakespeare's dramas.

555. Shakespeare's Histories and Tragedies. 3 hrs. Studies a selected group of Shakespeare's dramas.

556. Survey of Sixteenth-Century British Literature. 3 hrs. Studies the more important British writers of this period.

557. Survey of the Development of British Drama to 1642. 3 hrs. Studies British drama from its beginnings to 1642, exclusive of Shakespeare.

558. Survey of Seventeenth-Century British Prose and Poetry. 3 hrs. Surveys British literature of the period 1600 to 1660, with emphasis on the "schools" of Donne and Jonson.

559. Milton. 3 hrs. Studies the poetry and prose of Milton with emphasis on the major works.

560. Survey of British Literature, 1660-1740. 3 hrs. Surveys British literature from the Restoration to 1740.

562. Survey of British Literature, 1740-1798. 3 hrs. Surveys British literature from 1740 to 1798.

564. Survey of the British Novel to 1900. 3 hrs. Studies the development of British fiction from Richardson through Hardy.

565. Survey of Nineteenth-Century British Literature: Romantic. 3 hrs. Surveys poetry and prose of the period 1790 to 1830.

566. Survey of Nineteenth-Century British Literature: Victorian. 3 hrs. Surveys poetry and prose of the period 1830 to 1900.

567. Survey of Twentieth-Century British Literature. 3 hrs. Studies major twentieth-century British writers, emphasizing novelists and dramatists.

569. Studies in British Literature. 3 hrs. Examines various topics in British literature. Repeatable to nine hours.

570. Survey of the American Literary Renaissance, 1820-1870. 3 hrs. Examines the writings of Emerson, Thoreau, Hawthorne, Melville, Whitman, and others.

571. Survey of the Rise of Realism in American Literature, 1870-1920. 3 hrs. Examines American literature after the Civil War, focusing on the terms **realism** and **naturalism**.

572. Survey of American Drama. 3 hrs. Studies American drama from its beginnings to the present, with emphasis on the twentieth century.

577. Survey of the American Novel 1920 to 1960. 3 hrs. Studies techniques and historical backgrounds of the major novelists.

585. Literature of the South. 3 hrs. Emphasizes the fiction, poetry, and drama of Southern writers.

589. Studies in American Literature. 3 hrs. Studies notable movements, genres, and problems of American literature. Repeatable to nine hours.

590. Introduction to Composition Theory. 3 hrs. Discussion of competing theories of teaching composition, analysis of texts and courses that implement these theories, and evaluation of their usefulness in the classroom.

596. Caribbean Studies. 3 hrs. Variable content. Lecture series under the auspices of the Center for International Education.

597. Special Topics in British Literature. 6 hrs. A five-week course taught in London, England, offering an intensive study of special topics in British literature.

598. British Studies I. 3-6 hrs. A five-week course taught in London, England. Generally offers an intensive study of topics and figures from the beginning of English literature to 1800.

599. British Studies II. 3-6 hrs. A five-week course taught in London, England. Generally offers an intensive study of topics and figures in English literature from 1800 to the present.

627. Introduction to Publishing. 3 hrs. A practical introduction to the business of publishing, concentrating on publishing and marketing.

640. Bibliography and Methods of Research in English. 3 hrs. Instruction in the collection, evaluation, and presentation of research materials.

690. Teaching Freshman Composition. 1 hr. Paces English 101 and 102. Provides practical models for writing assignments, teaching techniques, and classroom management for teachers of Freshman Composition. Repeatable to four hours.

692. Special Problems. 3 hrs. Prerequisite: Consent of instructor. Provides the opportunity to pursue a special topic or area of interest.

694. Teaching Basic Writing. 3 hrs. Theories and methods of teaching developmental or basic courses in English. Includes a practicum in the Writing Lab or some other tutorial experience.

695. Advanced Methods in English. 3 hrs. Analyzes recent theories and practices in the teaching of composition, literature, and language in postelementary institutions. Repeatable to nine hours.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively

working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs., for a total of six hours.

701. **Seminar in Analysis of Linguistic Structure.** 3 hrs. Examines varying topics but usually treats the theory of language learning and/or its relations to meaning. Repeatable to nine hours.

702. **Readings in Linguistics.** 3 hrs. Examines varying topics, but usually treats practical aspects of classroom problems arising from widely varying dialects in the public schools. Repeatable to nine hours.

703. **Seminar in Teaching English as a Second Language.** 3 hrs. Examines the practical application of linguistic principles to second language teaching.

704. **Internship at the English Language Institute.** 7 hrs. Provides participation in all aspects of the English Language Institute, including teaching and testing.

714. **Tutorial in English and Germanic Philology I.** 3 hrs. Develops specialized areas of inquiry unavailable in the regular curriculum.

715. **Tutorial in English and Germanic Philology II.** 3 hrs. Develops specialized areas of inquiry unavailable in the regular curriculum.

716. **Seminar in Modern World Literature.** 3 hrs. Examines varying topics in British and Continental literature of the twentieth century: authors, movements, and genres. Repeatable to nine hours.

721. **Seminar in Fiction Writing.** 3 hrs. Prerequisites: Graduate standing, permission of the instructor, and enrollment in Center for Writers. Workshop in fiction writing. Repeatable to nine hours.

722. **Seminar in Poetry Writing.** 3 hrs. Prerequisites: Graduate standing, permission of the instructor, and enrollment in Center for Writers. Workshop in poetry writing. Repeatable to nine hours.

744. **Seminar in Literary Criticism.** 3 hrs. Examines specific issues in critical theory.

750. **Anglo-Saxon.** 3 hrs. Studies the Old English language and representative English literature prior to 1066.

751. **Beowulf.** 3 hrs. Reading *Beowulf* in Anglo-Saxon.

753. **Middle English.** 3 hrs. Presents readings in Middle English literature exclusive of Chaucer, emphasizing the language and dialects of English from 1100 to 1500.

754. **Seminar in Medieval Literature.** 3 hrs. Studies the works of a major English medieval writer or group of writers. Repeatable to nine hours.

758. **Seminar in Renaissance Literature.** 3 hrs. Studies the works of a major English Renaissance writer or group of writers. Repeatable to nine hours.

760. **Seminar in Seventeenth-Century British Literature.** 3 hrs. Provides extensive study of an author, topic, or genre in seventeenth-century British literature. Repeatable to nine hours.

761. **Seminar in Eighteenth-Century British Literature.** 3 hrs. Provides extensive study of an author, topic, or genre in eighteenth-century British literature. Repeatable to nine hours.

763. **Seminar in English Romanticism.** 3 hrs. Provides extensive study of selected poets and topics from the Romantic Era (1790-1830).

764. **Seminar in Victorianism.** 3 hrs. Provides extensive study of selected authors and topics from the Victorian Era (1830-1910).

769. **Seminar in Modern British Literature.** 3 hrs. Offers an examination of important modern British figures and movements. Repeatable to nine hours.

770. **Seminar in American Literature I.** 3 hrs. Presents a detailed study of selected American writers and movements before 1900. Repeatable to nine hours.

771. **Seminar in American Literature II.** 3 hrs. Presents a detailed study of selected American writers and movements since 1900. Repeatable to nine hours.

772. **Readings in American Literature.** 3 hrs. Presents a detailed study of selected American writers and movements. Repeatable to nine hours.

790. **English Colloquium.** 3 hrs. Introduces the theory and practice of teaching college writing, with emphasis on freshman composition. Repeatable to six hours.

791. **Research in English.** 1-16 hrs. Prerequisite: Approval of major professor. Must be taken pass/fail. Credit hours do not count toward degree.

792. **Special Problems.** 1-6 hrs. Prerequisite: Consent of instructor. Provides the opportunity to pursue a special topic or area of interest.

797. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

798. **Specialist Thesis.** 3 hrs.

898. **Dissertation.** 12 hrs.

ENVIRONMENTAL DESIGN (EVD-812)

597. **British Housing and Interiors.** 3-6 hrs. A series of lectures and tours by English authorities on interior design topics.

ENVIRONMENTAL SCIENCE (ESC-335)

501. **Water Quality Analysis.** 3 hrs. Prerequisite: CHE 311, MAT 137 or permission of instructor. Sampling and testing for water quality.

501-L. **Water Quality Laboratory.** 1 hr.

502. **Air Quality Analysis.** 3 hrs. Prerequisite: ESC 401/501 or permission of instructor. Air pollution sampling, analysis, and modeling techniques.

502-L. **Air Quality Laboratory.** 1 hr.

503. **Water and Wastewater Treatment.** 3 hrs. Prerequisite: ESC 401/501, BSC 380 or permission of instructor. Methods for control of water pollution. Management of solid waste.

503-L. **Water and Wastewater Treatment Laboratory.** 1 hr.

505. **Environmental Impact Statements.** 3 hrs. Preparation of environmental impact statements, EIS's, for projects with significant environmental impact.

510. **Storm Water Modeling.** 3 hrs.

531. **Principles of Industrial Hygiene.** 3 hrs. Detection and control of harmful agents in working environments, such as vapors, gases, mists, radiation, and sound.

531-L. **Industrial Hygiene Laboratory.** 1 hr.

592. **Special Problems.** 1-6 hrs.

789. **Seminar in Environmental Science I, II, III.** 1 hr.

FAMILY ECONOMICS AND MANAGEMENT (FEM-825)

545. **Socioeconomic Problems of the Family.** 3 hrs. Survey course which examines the interrelationship of social and economic forces impacting families.

640. **Advanced Household Equipment.** 3 hrs. Study of state-of-the art technology in household equipment.

644. **Seminar in Family Economics and Management.** 3 hrs. May be repeated for a total of 6 hours.

690. **Practicum in Family Economics and Management.** 1-6 hrs. Prerequisite: Permission of instructor. Supervised experience in the field of Family Economics and Management.

691. **Research in Family Economics and Management.** 1-4 hrs. Prerequisite: Permission of instructor.

692. **Special Problems in Family Economics and Management.** 1-4 hrs. Prerequisite: Consent of instructor.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed. Permission of instructor required. Prerequisite: REF 601.

FAMILY RELATIONS (FAM-830)

550. **Sexuality in the Family.** 3 hrs. Research and theory on sexual issues within the context of the family.

551. **Early Marriage Adjustment.** 3 hrs. Mate selection, marriage and marital adjustment in the United States. Emphasis will be on emotional and social needs of the couple and their extended family relationships.

553. **The Family in Later Life.** 3 hrs. An examination of family kinship patterns in later life; relationships with spouse, adult children, and siblings.

598. **British Studies Program: Studies in Family Relations.** 3-6 hrs. Current topics, trends, and issues which impact the family. Offered in London, England.

650. **Advanced Family Systems Theory.** 3 hrs. An in-depth study of family systems theories and their application to the substantive areas of family research.

651. **Parents and Children.** 3 hrs. The study of parenthood and parent/child relationships.

653. **Aging and the Family.** 3 hrs. Family-oriented problem solving and its relation to major gerontological issues such as intergenerational struggles, independence, loneliness, alternative living arrangements, etc.

654. **Special Topics in Gerontology.** 1-3 hrs. Study of current issues in the field of aging. Topics will vary. May be repeated for a maximum of 9 hours with permission of adviser.

655. **Marriage and Family Systems Intervention I.** 3 hrs. An indepth study of the conceptual links among systemic marriage and family therapy intervention strategies.

656. **Marriage and Family Systems Intervention II.** 3 hrs. A study of the integration and application of various systemic intervention techniques with each student's self-developed personal philosophy of marriage and family therapy.

658. **Seminar in Family Relations.** 3 hrs. May be repeated for a total of 6 hrs. Current topics, trends, and issues which concern and affect families.

659. **Professional Seminar in Marriage and Family Therapy.** 1 hr. Prerequisite: Permission of instructor. Includes professional organizations, licensure legislation, family law, legal and ethical codes, issues in Marriage and Family Therapy family law, and interprofessional cooperation. May be repeated.

690. **Practicum in Family Relations.** 3-9 hrs. Prerequisite: Permission of instructor. Supervised experiences in the field of family relations.

691. **Research in Family Relations.** 1-16 hrs.

692. **Special Problems in Family Relations.** 1-4 hrs.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who

are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

790. **Practicum in Marriage and Family Therapy.** 1-6 hrs. Prerequisite: FAM 650, FAM 655 and permission of instructor. Supervised clinical training with couples and families. May be repeated, for a total of 9 hours.

FINANCE (FIN-615)

570. **Managerial Finance.** 3 hrs. Prerequisites: Computer literacy; MBA 511. A study of financial analysis in managerial decision making. (See also MBA 570)

598. **International Financial Seminar Abroad.** 3 hrs. Prerequisite: Consent of Program Director. Conducted in London, England: a series of lectures and discussions involving authorities on international financial issues and practices.

640. **Managing Financial Institutions.** 3 hrs. Prerequisite: FIN 389. Gives the student an understanding of all the major financial institutions, their organizational structures, functions, and methods of operation.

652. **Problems in Investment.** 3 hrs. Prerequisite: FIN 389. Application of tested and experimental theories by investment managers to problems of short and long-term decision making.

672. **International Trade and Finance** 3 hrs. Prerequisites: FIN 389 and consent of instructor. A study of international trade theory, balance of payments adjustment mechanisms, exchange rate determination, and the role of the MNC in the international economy.

692. **Special Problems.** 3 hrs. Prerequisite: Consent of department chair. A supervised course in individual study and research.

699. **International Finance Research Abroad.** 3 hrs. Prerequisite: Consent of Program Director. A research course in international finance required for any student enrolled in FIN 598.

FOOD AND NUTRITION (FN-815)

510. **Intermediate Nutrition.** 3 hrs. Prerequisite: FN 362, CHE 321. The study of specific nutrient effects on human metabolism. Exploration of the roles of specific nutrients in metabolic pathways.

520. **Nutrition in the Life Cycle.** 3 hrs. Prerequisites: FN 362, BSC 250, BSC 251, CHE 251. Nutrient needs during the life cycle, including impact of food habits, socioeconomic, and physiological changes on nutrient requirements and intakes.

520-L. **Nutrition in the Life Cycle Laboratory.** 2 hrs. Corequisite: FN 520 and admission to the Coordinated Program in Dietetics. Development of skills in interviewing, counseling and basic assessment of nutritional status of healthy individuals.

530. **Experimental Foods.** 3 hrs. Prerequisites: FN 362 and CHE 251, 251L. Study of selected nutritional, chemical, physical, and sensory properties of foods in relation to preparation procedures. Includes laboratory.

560. **Advanced Nutrition.** 3 hrs. Prerequisites: FN 362, CHE 321, and a course in physiology. Biochemical and physiological interactions among vitamins, carbohydrates, proteins, fats and elements in relation to nutritional requirements and utilization.

561. **Clinical Nutrition.** 3 hrs. Prerequisites: FN 363, CHE 321, and a course in physiology. Biochemical and physiological bases for dietary treatment of various disease states.

561-L. **Clinical Nutrition Laboratory.** 2 hrs. Corequisite: FN 561 and admission to the Coordinated Program in Dietetics. Application of dietetics in a hospital setting.

562. **Food Preservation.** 3 hrs. Study of methods and techniques of preserving and storing foods. Convenience foods studies.

563. **Applied Community Nutrition.** 3 hrs. Prerequisite: Admission to the coordinated program. Study of nutrition assessment methodology and resources available within the community. Includes field experience.

563-L. **Applied Community Nutrition Laboratory.** 2 hrs. Corequisite: FN 563. A laboratory setting to study nutrition assessment methodology and resources available within a community.

564. **Clinical Dietetics.** 4-15 hrs. Permission of instructor required. Prerequisites: FN 365 and 463. Study of disease states and dietary management in clinical settings.

630. **Macronutrients.** 2 hrs. Corequisite CHE 526. Advanced study of macronutrient digestion, absorption, function interaction and metabolism.

631. **Micronutrients.** 2 hrs. Corequisite: CHE 526. Advanced study of vitamin and mineral digestion, absorption, function, interaction and deficiency symptoms.

641. **Advanced Clinical Nutrition.** 3 hrs. Prerequisite: FN 461. A detailed study of the pathophysiology of various disease states as related to nutrition. Emphasis organ systems: cardiovascular, renal, and pulmonary.

662. **Community Health and Nutrition.** 3 hrs.

663. **The Nutrition of Children.** 3 hrs.

664. **Seminar in Food and Nutrition.** 3 hrs. May be repeated for a total of 6 hours.

667. **Nutrition for Teachers.** 3 hrs.

691. **Research in Food and Nutrition.** 1-16 hrs.

692. **Special Problems in Nutrition.** 1-4 hrs.

693. **Readings in Food and Nutrition.** 1 hr. Recent developments in research related to food and nutrition. May be repeated for a total of 3 hrs.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs. maximum. Credit deferred until thesis is completed.

FOOD SCIENCE TECHNOLOGY (FST-396)*

505. **Food Process Engineering.** 3 hrs. Application of engineering principles in food processing.

510. **Food and Drug Laws-Standards and Regulations.** 3 hrs. An examination of food laws and food quality attributes.

550. **Food Analysis I.** 2 hrs. Principles of chemical, microbiological, and physical methods used in food analysis, and application of these methods to examination of raw and processed foods.

550-L. **Food Analysis I Laboratory.** 2 hrs.

551. **Food Analysis II.** 2 hrs. Continuation of FST 550.

551-L. **Food Analysis II Laboratory.** 2 hrs.

610. **Food Enzymes.** 3 hrs. A review of enzymatic reactions and problems occurring in food during collection, manufacture, storage and distribution.

620. **Food Toxicology.** 2 hrs. Principles and processes of food spoilage and toxicology.

620-L. **Food Toxicology Laboratory.** 2 hrs.

630. **Synthetic Foods.** 2 hrs. Concepts of synthetic and unconventional foods and their manufacture.

630-L. **Synthetic Foods Laboratory.** 2 hrs.

687. **Seminar in Food Science.** 3 hrs. Selected topics in the chemistry, biochemistry, and microbiology of foods and food products.

688. **Seminar in Food Technology.** 3 hrs. Selected topics in the application of food science principles to the food industry.

691. **Research in Food Science.** 1-9 hrs.

692. **Special Problems in Food Science and Technology I, II, III, IV.** 2-8 hrs. A course in special techniques, designed for food science and technology majors.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs.

*This program has been temporarily suspended.

FOOD SERVICE MANAGEMENT (FSM-827)

540. **Food Service Management.** 4 hrs. A study of management of food service systems and the interrelationship of the components of these systems.

541. **Purchasing for the Hospitality Industry.** 3 hrs. Procurement of food and non-food materials in hospitality and related industries.

542. **Food Service Layout and Design.** 3 hrs. Planning, designing, and layout of food service facilities with emphasis on arrangement and selection of equipment.

570. **The School Lunch.** 3 hrs.

573. **Food Systems Management.** 4 hrs. Organization and management of food service operations; cost control techniques; layout and equipment; and human relations.

577. **Administrative Dietetics.** 6 hrs. Prerequisites: FSM 573. Study and application of management theory and techniques in the supervision of food service personnel.

672. **Quantity Food Preparation.** 3 hrs. Prerequisite: Permission of instructor.

673. **School Lunch Supervision.** 3 hrs.

674. **Institution Organization and Administration.** 3 hrs. Analysis of the food service industry and its systems in order to better produce an organization of related activities and provide the means for their director and development.

675. **Production Management in Food Service Systems.** 3 hrs. Prerequisite: FSM 674. An indepth exploration of production planning and control techniques including production scheduling, inventory management, and design and layout of food service systems.

676. **Seminar in Institution Management.** 3 hrs. May be repeated for a total of 6 hours.

677. **Quantitative Assessment of Food Service Systems.** 3 hrs. Prerequisite: FSM 674. Development of planning, organizing and controlling guidelines for management of food service systems.

692. **Special Problems in Institution Administration.** 1-4 hrs.

693. **Readings in Food Service Management.** 1 hr. Recent developments in research related to food service management. May be repeated for a total of 3 hrs.

694. **Current Topics in Food Service Management.** 1-3 hrs. Prerequisite: FSM 674 and consent of instructor. Group and individual study of a current problem in food service management. May be repeated for credit.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

FOREIGN LANGUAGES (FL-228)*

531. **Foreign Language Film.** 1-3 hrs. Prerequisite: Consent of instructor. Study of literary and linguistic aspects of foreign films in a given foreign language.

561. **Methods of Teaching Foreign Languages.** 3 hrs. Prerequisite: Consent of instructor. May be taken for a total of six (6) hours.

562. **Translation.** 3 hrs. Prerequisite: Consent of instructor.

581. **Advanced Credit for Study Abroad.** 3-9 hrs. Arr. Prerequisites: Advanced knowledge of the language to be studied; otherwise same as FL 381.

FRENCH (FRE-241)

531. **French Film.** 1-3 hrs. Prerequisite: Consent of instructor. Study of literary and linguistic aspects of French films.

535. **Modern France.** 3 hrs. Contemporary French education, social attitudes, politics, urban and rural life.

542. **Survey of Literature I.** 3 hrs. Prerequisite: FRE 341. French literature from the Middle Ages through the 18th century.

543. **Survey of Literature II.** 3 hrs. Prerequisite: FRE 341. French literature from the 18th century through the mid-20th century.

545. **Twentieth Century French Drama.** 3 hrs. Prerequisite: FRE 341. A survey of 20th century drama including traditional and avantgarde theatre.

546. **French Novel and Short Story.** 3 hrs. Prerequisite: FRE 341. Prose fiction of the 18th, 19th, and 20th centuries, studied in conjunction with films based on the works or thematically related to them.

581. **Study Abroad.** 3-9 hrs. Arr. Prerequisite: Advanced knowledge of the language to be studied; otherwise same as FRE 381.

605. **Old French.** 3 hrs. May be taken for a total of six (6) hours.

641. **French Seminar.** 3 hrs. May be taken for a total of nine (9) hours.

GERMAN (GER-243)

506. **Advanced Grammar.** 3 hrs. Prerequisite: GER 341. Advanced study of German grammar; reading and stylistic analysis.

531. **German Film.** 3 hrs. Prerequisite: Permission of instructor. Study of literary and linguistic aspects of German film.

535. **Modern Germany.** 3 hrs. Prerequisite: GER 305, 331, or 341. A cultural survey of the German-speaking areas in postwar Europe.

542. **Survey of Literature I.** 3 hrs. Prerequisite: GER 341. A study of German literature during the Age of Goethe, including the storm and stress period, classicism, and early Romanticism.

543. **Survey of Literature II.** 3 hrs. Prerequisite: GER 341. A study of German literature from the post-Goethe 19th century to the present.

545. **Modern Drama.** 3 hrs. Prerequisite: GER 341. A study of German dramatic works representative of historically important movements and relevant human problems of the 19th and 20th centuries.

546. **Novelle.** Prerequisite: GER 341. A study of important German Novellen representative of literary currents in the 19th and 20th centuries, and an examination of literary theory relevant to the genre.

581. **Study Abroad.** 3-9 hrs. Prerequisites: Intermediate knowledge of the language to be studied; prior arrangements for evaluation and receipt of credit. Credit will be granted for systematic study of the language and culture or the language and literature of a foreign area. Study must be under the direction of a recognized teaching institution approved in advance by the Department of Foreign Languages and Literatures. The department will examine and grade the progress and achievement of the participants in this program before granting credit.

605. **Middle High German.** 3 hrs. May be taken for a total of six (6) hours.

645. **German Seminar.** 3 hrs. May be taken for a total of nine (9) hours.

LATIN (LAT-242)

545. **Reading in Latin Literature.** 3 hrs. Prerequisite: LAT 101 or equivalent. May be taken for a total of nine hours if topic varies.

SPANISH (SPA-240)

505. **Advanced Conversation and Phonetics.** 3 hrs.

506. **Advanced Composition and Grammar.** 3 hrs. Review of basic grammar, progressing to more sophisticated aspects; idiom study; composition.

535. **Spanish Culture and Civilization.** 3 hrs. Prerequisite: SPA 202. A chronological survey of Spanish history and culture from Celt-Iberian times to present.

536. **Latin American Culture and Civilization.** 3 hrs. A chronological survey of Hispanic civilization and institutions.

542. **Survey of Peninsular Literature I.** 3 hrs. Prerequisite: SPA 305. The literature of Spain from the Medieval period through the Golden Age.

543. **Survey of Peninsular Literature II.** 3 hrs. Prerequisite: SPA 305. The literature of Spain in the 19th and 20th centuries.

546. **Don Quijote.** 3 hrs. Prerequisite: SPA 305. A study of the Cervantes novel, of its historical and literary background, and of the principal critical materials.

552. **Survey of Latin American Literature** 3 hrs. Prerequisite: SPA 341. The literature of Latin America from the Colonial period through the 19th century.

554. **Contemporary Latin American Literature.** 3 hrs. Prerequisite: SPA 341. A survey of fiction, poetry, and drama in the 20th century.

581. **Study Abroad.** 3-9 hrs. Prerequisite: Intermediate knowledge of the language to be studied; prior arrangements for evaluation and receipt of credit. Credit will be granted for systematic study of the language and culture of the language and literature of a foreign area. Study must be under the direction of a recognized teaching institution approved in advance by the Department of Foreign Languages and Literatures. The department will examine and grade the progress and achievement of the participants in this program before granting credit.

605. **Old Spanish.** 3 hrs. May be taken for a total of six (6) hours.

641. **Spanish Seminar.** 3 hrs. May be taken for a total of nine (9) hours.

*Graduate courses in this department do not constitute a degree program. Courses may be taken as a supplement to other programs.

FORENSIC SCIENCE (FSC-375)

530. Survey of Forensic Toxicology. 3 hrs. The isolation and identification of drugs and poisons from a biological matrix.

540. Drug Identification. 3 hrs. Lectures, demonstrations, and discussions covering all aspects of drug identification, particularly related to law enforcement.

542. Arson and Explosives. 3 hrs. Introduction to the investigation of arson and bombings.

542-L. Arson and Explosives Laboratory. 1 hr.

591. Special Projects in Forensic Science. 2 hrs. Individual studies in forensic science principles.

591-L. Laboratory for Forensic Science 591. 2 hrs. Hands-on experience with true forensic science situations.

691. Research. 1-16 hrs.

GENERAL BUSINESS ADMINISTRATION (GBA-616)

598. International Business Seminar Abroad. 3-6 hrs. Prerequisite: Consent of Program Director. Conducted in various locations abroad: a series of lectures and discussions involving authorities on international business issues and practices.

GENERAL STUDIES (GS-010)

500. Orientation to Instructional Settings. 1 hr.

GEOGRAPHY AND AREA DEVELOPMENT (GHY-268)

500. Geography of Mississippi. 3 hrs. Survey of physical, economic, and historical geography of state; emphasis on man-environment relations and problems.

501. Geography of the United States and Canada. 3 hrs. A geographical analysis of the physical and human characteristics of the region.

502. Geography of Middle America and the Caribbean. 3 hrs. A geographical analysis of the physical and human characteristics of the region.

503. Geography of South America. 3 hrs. A geographical analysis of the physical and human characteristics of the region.

504. Geography of Europe. 3 hrs. A geographical analysis of the physical and human characteristics of the region.

505. Geography of the Soviet Union. 3 hrs. A geographical analysis of the physical and human characteristics of the region.

506. Geography of Africa. 3 hrs. A geographical analysis of the physical and human characteristics of the region.

507. Geography of East and South Asia. 3 hrs. A geographical analysis of the physical and human characteristics of the region.

508. Geography of Southwest Asia. 3 hrs. A geographical analysis of the physical and human characteristics of the region.

510. Advanced Cartography. 2 hrs. Prerequisite: GHY 310. Corequisite: GHY 510-L. Map projections, geodesy, quantitative symbolization, color separation, reproduction.

510-L. Advanced Cartography Laboratory. 2 hrs. Corequisite: GHY 510. Advanced map design, scribing, and reproduction laboratory.

511. Aerial Photograph Interpretation. 2 hrs. Interpretation and application of aerial photographs and other remote sensing images for geographic, environmental, and planning purposes.

511-L. Aerial Photography Interpretation Laboratory. 1 hr. Corequisite: GHY 511. Systematic treatment of elements and steps involved in interpreting, measuring, and mapping of images appearing on aerial photographs.

512. Remote Sensing of the Environment. 2 hrs. Prerequisite: GHY 511 or permission of instructor. Theory of acquisition processing and analysis of remotely sensed data and images and survey of environment applications of remote sensing.

512-L. Remote Sensing Laboratory. 1 hr. Corequisite: GHY 512. Processing and analysis of data and images collected by remote sensing methods.

513. Field Methods. 3 hrs. Basic methods used to classify, analyze, and report field-gathered data in geography and planning.

516. Computer Application in Geography. 2 hrs. Prerequisite: Experience using nonprocedural computer languages. Corequisite: GHY 516-L. Concepts and applications of computerized geographic mapping, information, simulation, and analytic systems.

516-L. Computer Applications in Geography Laboratory. 1 hr. Corequisite: GHY 516. Operation of computerized geographic mapping information, simulation, and analytic systems. Uses nonprocedural languages.

517. Geographic Information System Design. 2 hrs. Prerequisite: FORTRAN or Pascal. Theory, design, and application of geographic data handling and analysis systems.

517-L. Geographic Information System Design Laboratory. 2 hrs. Pre- or Co-requisite: GHY 517. Design and programming of geographic data handling and analysis systems using the Ada programming language.

525. Applied Climatology. 3 hrs. An introduction to the application of climate elements to various forms of man's economic and social activities.

527. Meteorology. 3 hrs. Study of temporal and areal variations in composition, structure, and workings of the atmosphere. Practice in use of instruments and measurements.

528. Severe Storms. 3 hrs. An examination of the causes, characteristics and destructive nature of severe weather.

532. Perception of the Spatial Environment. 3 hrs. An analysis of man's perception of his cultural/social environment; considers both the physical and man-made landscape.

535. Historical Geography of the American Landscape. 3 hrs. Evolution of cultural landscapes of the area now comprising the United States; emphasis on processes of change.

540. Population and Human Resources. 3 hrs. A geographical analysis of the biological and cultural characteristics of population.

551. Industrial Location Analysis. 3 hrs. Principles of industrial location analysis; emphasis on theory, locational decision making, and regional location of manufacturing.

552. Geography and Soils. 3 hrs. Formation, distribution, and use of soils; emphasis on soils of south Mississippi; fieldwork and laboratory analysis.

553. Transportation and Land Use. 3 hrs. Prerequisite: GHY 350 or permission of instructor. Various transportation modes and the effect they have on contemporary development problems.

573. Water Resources. 3 hrs. Study of hydrologic processes and their application to needs of cities, industry, agriculture, and recreation.

574. Watershed Management. 3 hrs. Investigation of watersheds as planning and management units; emphasis on relationship of water to other resources. Game theory used.

589. Caribbean Studies. 3 hrs. Variable content. Lecture series, field exercises, and research offered abroad under the auspices of the Center for International Education.

599. British Studies: Geography of the British Isles. 3-6 hrs. An overview of the human and physical geography of the British Isles. Includes field trips and directed research.

610. Seminar in Research Techniques and Presentation of Geographic Data. 1-3 hrs. Required of all geography graduate students.

612. Seminar in Cartography. 3 hrs. May be repeated up to six (6) hours with change in content to include cartographic, aerial photo interpretation, remote sensing, statistical, and geographic information systems.

615. Quantitative Methods in Spatial Analysis. 3 hrs. A basic course in statistical and other quantitative techniques applied to problems of spatial analysis.

617. Geography for Teachers. 3 hrs. Current theories, practices, and techniques used in teaching geography at the elementary and secondary levels.

623. Seminar in Environmental Climatology. 3 hrs. May be repeated up to six (6) hours with change in content.

631. Seminar in Cultural-Historical Geography. 3 hrs.

650. Seminar in Economic Geography. 3 hrs. May be repeated up to six (6) hours with change in content.

673. Seminar in Water Resources. 3 hrs. May be repeated to six (6) hrs. with change in content.

680. Seminar in History and Development of Geographic Thought. 3 hrs.

691. Internship. 1-16 hrs. May be repeated for a total of nine.

692. Special Problems. 1-6 hrs.

693. Internship in Cartography. 1-9 hrs. Prerequisite: Permission of instructor.

694. Prolaboratory in Cartography. 1-3 hrs. Prerequisite: Permission of instructor. Preparation and presentation of a professional cartographic or remote sensing project. May be repeated with change of content for a total of six (6) hours of credit.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs.

898. Dissertation. 12 hrs.

GEOLOGY (GLY-340)

501. Principles of Stratigraphy. 3 hrs. Prerequisites: GLY 304, 308, 341, or permission of instructor. A study of the character and distribution of sedimentary rock units in space and time.

503. Optical Mineralogy. 3 hrs. Pre- or Corequisite: GLY 304. Introduction to optical mineralogy, and thin section study of rocks using polarizing microscope.

+ **503-L. Optical Mineralogy Laboratory.** 1 hr. Must be taken concurrently with GLY 503.

504. Coal Petrology. 2 hrs. Prerequisites: GLY 304 or permission of instructor; BSC 226 and CHE 251 recommended. A study of origin, coalification, and maceral composition of coal and the application to problems of paleobotany, oil and gas prospecting, and fuel technology.

+ **504-L. Coal Petrology Laboratory.** 1 hr. Must be taken concurrently with GLY 504.

505. Sedimentology. 3 hrs. Prerequisite: GLY 304. Origin of sediments, sedimentary structures, and classification of sedimentary rocks.

+ **505-L. Sedimentology Laboratory.** 1 hr. Must be taken concurrently with GLY 505.

509. **Carbonate Sediments.** 3 hrs. Prerequisite: GLY 403. Comprehensive treatment of limestone sedimentology and petrology.

+ 509-L. **Carbonate Sediments Laboratory.** 1 hr. Pre- or Corequisite: GLY 509. Application of field and laboratory studies to an understanding of the genesis and diagenesis of ancient and modern carbonates.

510. **Elements of Geochemistry.** 3 hrs. Prerequisite: GLY 304. Chemical principles governing the formation of minerals and rocks and their reactions with the lithosphere, hydrosphere, atmosphere, and biosphere.

520. **Applied Geophysics I.** 2 hrs. Prerequisites: GLY 308, MAT 168, PHY 106 or consent of instructor. Introduction to seismic methods used in hydrocarbon and mineral exploration.

+ 520-L. **Applied Geophysics I Laboratory.** 1 hr. Corequisite: GLY 520. Introductory exercises in seismic computation and interpretation.

521. **Applied Geophysics II.** 2 hrs. Introduction to gravity, magnetic and electrical methods used in hydrocarbon and mineral exploration.

+ 521-L. **Applied Geophysics II Laboratory.** 1 hr. Corequisite: GLY 521. Introductory exercises in computation and interpretation of gravity, magnetic and electrical fields.

522. **Geophysical Well-Logging.** 2 hrs. Prerequisites: GLY 101, MAT 103, PHY 106. Pre- or Corequisite: GLY 505. Principles of obtaining data from bore hole instruments, and geological interpretation of data.

+ 522-L. **Geophysical Well-Logging Laboratory.** 1 hr. Must be taken concurrently with GLY 522.

530. **Principles of Geology for Science Teachers.** 3 hrs. Prerequisite: Bachelor's degree in education or equivalent. Principles of physical and historical geology for teachers. Not applicable to geology degree.

531. **Coastal Marine Geology.** 3 hrs. Gulf Coast Research Laboratory. Prerequisites: 12 credit hrs. in geology. A study of inshore and nearshore geological processes, sedimentation patterns and landform development. May be taken as MAR 582.

543. **Calcareous Micropaleontology.** 3 hrs. Prerequisite: GLY 341. Taxonomy, morphology, and stratigraphic use of microfossils.

+ 543-L. **Calcareous Micropaleontology Laboratory.** 1 hr. Must be taken concurrently with GLY 543.

544. **Siliceous Micropaleontology.** 3 hrs. Prerequisite: GLY 341. Taxonomy, morphology, and stratigraphic use of siliceous and organic-walled microfossils.

+ 544-L. **Siliceous Micropaleontology Laboratory.** 1 hr. Must be taken concurrently with GLY 544.

550. **Geological Marine Science.** 3 hrs. Pre- or Corequisite: GLY 505 or permission of instructor. Study of the formation and deformation of the oceanic crust and the distribution and character of marine sediments.

+ 550-L. **Geological Marine Science Laboratory.** 1 hr. Pre- or Corequisite: GLY 550. Examination and interpretation of marine geological samples and data.

551. **Advanced Field Geology.** 6 hrs. Supervised detailed individual mapping project.

565. **Engineering Geology.** 3 hrs. Prerequisite: GLY 308 or permission of instructor. The integration of geologic and engineering principles and their application in the evaluation and utilization of Earth resources and the mitigation of natural and human-induced hazards.

570. **Petroleum Geology.** 3 hrs. Pre- or Corequisite: GLY 401, or permission of instructor. The origin, occurrence, and accumulation of oil and natural gas.

574. Geological Excursion. 1-4 hrs. Field studies of geological phenomena in areas remote from the campus, by means of 8-10 day field trips.

576. Hydrology. 3 hrs. Pre- or Corequisite: GLY 401, or permission of instructor. An introduction to the origin, distribution, movement, and properties of the waters of the earth.

587. Industrial Rocks and Minerals. 3 hrs. Prerequisite: Permission of instructor. Nature and formation of industrial rock and mineral deposits.

588. Ore Deposits. 3 hrs. Prerequisites: GLY 304, 410. Nature and formation of metallic mineral concentrations.

600. Paleoclimatology. 3 hrs. Prerequisite: Permission of instructor. Past climatic conditions based on the rock, mineral, and biologic record.

601. Pleistocene Geology. 3 hrs. Prerequisite: Permission of instructor. Earth history of the Pleistocene epoch, with emphasis on glacial phenomena.

602. Hypotheses of Continental Drift. 3 hrs. Prerequisite: Permission of instructor. Study of evidence and hypotheses regarding crustal dislocations.

603. Sedimentary Environments. 3 hrs. Prerequisite: Permission of instructor. Comparison of modern environments of sedimentation with the evidence regarding paleoenvironments.

604. Tectonics. 3 hrs. Prerequisite: Permission of instructor. Investigation of large-scale crustal deformation.

605. Petrology of Igneous Rocks. 3 hrs. Prerequisite: GLY 403/503; and GLY 410/510 recommended. Origin, classification, composition, and geochemistry of igneous rocks.

+ **605-L. Igneous Petrology Laboratory.** 1 hr. Must be taken concurrently with GLY 605.

606. Petrology of Metamorphic Rocks. 3 hrs. Prerequisites: GLY 403/503; and GLY 410/510 recommended. Origin, classification, composition, and geochemistry of metamorphic rocks.

+ **606-L. Petrology of Metamorphic Rocks Laboratory.** 1 hr. Must be taken concurrently with GLY 606.

607. Sedimentary Petrology. 3 hrs. Prerequisites: GLY 403/503, 405/505, and permission of instructor. Origin, classification, composition and geochemistry of sedimentary rocks.

+ **607-L. Sedimentary Petrology Laboratory.** 1 hr. Must be taken concurrently with GLY 607.

608. Gulf Coast Geology. 3 hrs. Prerequisite: Permission of instructor. Stratigraphy, structural geology, and mineral resources of the Gulf Coastal Province of the U.S.

612. Isotope Geology. 3 hrs. Prerequisite: Permission of instructor. Theory and applications of geochronology and the use of isotopes as tracers of geological processes.

615. Clay Mineralogy. 3 hrs. Prerequisite: Permission of instructor. Origin, structure, and chemistry of clays, identification techniques, clay-water systems, soil formation and engineering applications.

+ **615-L. Clay Mineralogy Laboratory.** 1 hr. Corequisite: GLY 615. Laboratory techniques for the identification of clay minerals.

641. Paleocology. 3 hrs. Prerequisites: GLY 341 or equivalent. A study of the relationship between ancient organisms and the environment in which they lived; field trips.

677. Advanced Groundwater Hydrology. 3 hrs. Prerequisite: GLY 476/576 or permission. The advanced study of groundwater flow and seepage, well hydraulics, water

quality, groundwater management, modeling techniques, and exploration methods pertaining to water resource investigations.

686. **Marine Mineral Deposits.** 3 hrs. Prerequisite: Permission of instructor. Genesis and mode of occurrence of continental shelf and deepsea mineral deposits.

689. **Seminar.** 1 hr. Prerequisite: Permission of instructor. May be repeated once for a total of two hours credit.

691. **Research in Geology.** 1-16 hrs. Prerequisite: Approval of major instructor.

692. **Special Problems in Geology I, II, III.** 1-3 hrs. Investigation of a specific problem not related to thesis research.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs.

HEALTH AND SAFETY EDUCATION (HSE-715)

536. **Stress Management: Concepts and Strategies for Health Education.** 3 hrs. Theory and application of primary prevention strategies in stress management programs.

540. **Driver Education.** 3 hrs. Survey of instruction, use of training cars, delegation of authority, legal responsibilities, and teacher qualifications.

541. **Traffic Safety Education.** 3 hrs. An indepth study of driver, pedestrian, engineering, enforcement, and other traffic safety problems.

542. **Laboratory Programs in Driver Education.** 3 hrs. Examination of aims, objectives, and role of laboratory programs in driver education.

543. **Methods of Driver and Traffic Safety Education.** 3 hrs. Prerequisite: HSE 540. Organization and administration of driver education programs.

544. **Simulation in Driver Education.** 3 hrs. Prerequisites: HSE 540 and 543. Audiovisual instructional methods that are used to complement and supplement other instructional techniques utilized in driver education programs.

545. **Driver Education Laboratory.** 1 hr. This course is designed to provide students in HSE 443 with supervised teaching experience.

546. **Innovative Programs in Driver Education.** 3 hrs. New and unique teaching methods of driver and traffic safety education.

588. **Motorcycle Safety Education.** 3 hrs. Analysis of motorcycle traffic problems and methods of teaching classroom and laboratory phases of motorcycle education.

589. **Driver Education for Special Students.** 3 hrs. Curriculum development and teaching materials in traffic safety education.

639. **Energy Conservation Strategies for Motorists.** 3 hrs. Workshop. Use of computerized equipment to study effects of various driving behaviors on fuel consumption.

642. **Alcohol and Traffic Safety.** 3 hrs. Workshop. Content and methods for teaching about relationships of alcohol use to traffic safety.

643. **Multiple Car Facilities.** 3 hrs. Workshop. Methods for large group instruction in behind-the-wheel driving courses.

644. **Pupil Transportation and Safety.** 3 hrs. Workshop. Planning strategies for designing safe and economical transportation networks.

692. **Special Problems in Safety.** 3 hrs.

740. **Facilities and Equipment in Driver Education Programs.** 3 hrs. Planning for facilities and equipment for driver education programs.

741. Multi-Media Systems in Driver Education Programs. 3 hrs. Unique adaptation of newer media systems to the broad problems in driver and traffic safety.

742. Organization and Administration of Driver and Traffic Safety Education. 3 hrs. Organization and administration aspects of driver and traffic education as they relate to the total school.

743. Addictive Substances as Related to Traffic Safety Education. 3 hrs. A study of addictive substances and associated problems in traffic safety.

HISTORY (HIS-272)

500. Italian Studies. 3 hrs. May be repeated for a total of six hours. Variable topics in Italian history. Offered abroad under auspices of Center of International Education.

507. Renaissance and Reformation. 3 hrs. A survey of major intellectual/religious changes in early Modern Europe.

509. Themes in the Non-Western World. 3 hrs. An analysis of economic, political, social, and cultural issues which have shaped relations between the Western and non-Western worlds.

511. History of the USSR. 3 hrs.

512. English Constitutional History. 3 hrs. Emphasis on the main trends in the evolution of the modern common law system and the contemporary constitution.

513. Medieval Life and Thought. 3 hrs.

514. Nazi Germany. 3 hrs. A study of the political, diplomatic, economic, and social developments in Germany from 1919 through 1945.

515. French Revolution and Napoleon. 3 hrs. A study of Revolutionary and Napoleonic France and its impact on Europe.

516. Europe 1815-1870. 3 hrs. A survey of early nineteenth century Europe, with emphasis on nationalism and the quest for reform.

517. Europe 1870-1914. 3 hrs. A survey of late nineteenth and early twentieth century Europe with emphasis on the growth of democracy, the expansion of empires, and the origin of World War I.

518. Europe 1914-1945. 3 hrs.

519. Europe Since 1945. 3 hrs. A survey of European history since the end of World War II, covering such key developments as economic reconstruction, the Cold War, NATO, and the Common Market.

520. France, 1815-Present. 3 hrs. A survey of French history after Napoleon emphasizing the evolution of political and social structures.

521. Tudor-Stuart Britain. 3 hrs.

522. British Studies: History of Science. 3-6 hrs. Offered abroad under auspices of Institute of Anglo-American Studies.

523. History of Science and Technology, 1500-1950. 3 hrs. An interdisciplinary course designed for both science and liberal arts students. Traces the development of science and technology and their role in society from the Renaissance to the present. (Cross-listed under BSC 523 and PHY 585.)

524. Intellectual and Cultural History of Modern Europe. 3 hrs. Philosophy, social thought and the arts from the Enlightenment to the present.

525. Nineteenth and Twentieth Century Britain. 3 hrs.

526. Topics in British Commonwealth History. 3 hrs. The British Commonwealth from its mid-nineteenth century origins to the present. Will focus on Canada and various other Commonwealth nations.

540. Age of Jefferson and Jackson. 3 hrs. A study of political, social, and cultural changes in the United States from 1789-1848.

542. **The Old South.** 3 hrs. The social, economic, and cultural history of the antebellum South with particular emphasis on the plantation system and slavery.

543. **The New South.** 3 hrs. An analysis of the peculiarities of the South's social, economic, political, and intellectual development from 1877 to the present. Emphasis is placed on those factors making the South distinctive in American history.

545. **U.S. Foreign Relations to 1914.** 3 hrs. A study of U.S. foreign policy from the American Revolution to World War I with an emphasis on manifest destiny and American expansion.

546. **U.S. Foreign Relations Since 1914.** 3 hrs. A continuation of HIS 545 with an emphasis on the diplomacy of World War I, the events leading to World War II, World War II, and the Cold War.

547. **Colonial America.** 3 hrs. Development of social, political, economic, and religious life in the English colonies of North America to 1763.

548. **The American Revolution.** 3 hrs. A discussion course concerning the dispute between Great Britain and its American colonies which led to the development of a new nation.

550. **The Southern Frontier.** 3 hrs. A discussion course concerning pioneer life—primarily in the South—from the Atlantic seaboard to the Mississippi Valley.

551. **The Western Frontier.** 3 hrs. Examines the significance of frontier types west of the Mississippi including explorers, mountain men, cowboys, farmers, miners, railroaders, and Indians.

552. **The Sectional Controversy and the Civil War, 1848-1877.** 3 hrs. An examination of sectional conflict, Civil War, and Reconstruction with primary emphasis on political and military history.

553. **The Origins of Modern America, 1877-1919.** 3 hrs. A survey of political, economic, diplomatic, and social developments in the United States from the close of the Civil War through the end of World War I.

554. **Twentieth Century America, 1919-1945.** 3 hrs. A detailed examination of the social, intellectual, political, and economic history of the interwar years.

556. **Law in American History.** 3 hrs. Traces the relationship between law and society throughout American history.

558. **Our Times.** 3 hrs. A detailed examination of social, intellectual, political, diplomatic, and economic history since World War II.

575. **A History of American Thought I.** 3 hrs. A survey of American thought from the 17th through the 19th century.

576. **A History of American Thought II.** 3 hrs. A survey of 20th century American thought.

580. **History of Mexico and the Caribbean.** 3 hrs.

583. **Studies in South American History.** 3 hrs. May be repeated for a total of six hours.

589. **Austrian Studies.** 3-6 hrs. Variable topics in central European history. Offered abroad under auspices of Center of International Education.

599. **British Studies: Seminar in European Studies.** 3-6 hrs. Lecture series and research in European studies offered abroad under auspices of Institute of Anglo-American Studies.

692. **Special Problems, I, II, III, IV.** 1-4 hrs.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who

are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 3 or 6 hrs. for a total of 6 hrs.

710. **Philosophy and Methods of History.** 3 hrs. Acquaints graduate students with the nature and methods of historical study. Topics include research and bibliographic techniques; topic selection and question-framing; data collection, analysis, and interpretation, including quantification.

712. **Seminar in European History, 1870 to the Present.** 3 hrs. May be repeated for a total of nine hours.

716. **British History.** 3 hrs. May be repeated for a total of nine hours.

717, 718. **Readings in European History I, II.** 3 hrs. each. May be repeated for a total of nine hours.

740. **Interpretations in American Historiography.** 3 hrs.

746, 747. **Readings in American History I, II.** 3 hrs. each. May be repeated for a total of nine hours.

748. **Readings in Mississippi History.** 3 hrs.

749. **Seminar in American History.** 3 hrs. May be repeated for a total of nine hours.

750. **Inter-University Consortium Seminar.** 3 hrs. May be repeated for a total of nine hours. Variable topics in United States and Modern European history offered in conjunction with the History faculty of Mississippi State University.

780. **Latin American History.** 3 hrs. May be repeated for a total of nine hours.

791. **Research in History.** 1-16 hrs. Prerequisite: Approval of major professor.

796. **Practicum in the Teaching of History in Colleges and Universities.** 3 hrs.

797. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

799. **British Studies: Advanced Seminar in European Studies.** 3-6 hrs. Lecture series and research in European studies offered abroad under auspices of Institute of Anglo-American Studies.

898. **Dissertation.** 1-12 hrs. for a total of 12 hours.

HOME ECONOMICS EDUCATION (HEE-820)

501. **Family Life Education.** 3 hrs. General philosophy and broad principles of family life education with emphasis on planning, implementing and evaluating such educational programs.

504. **Consumer Economics.** 3 hrs. Consumer problems in present day society.

509. **Occupational Home Economics.** 3 hrs. The exploration and planning of teaching units for home economics related occupations.

605. **Supervision of Home Economics Education.** 3 hrs. Practices and procedures in the supervision of vocational home economics.

606. **Selected Topics in Home Economics Education.** 3 hrs. (May be repeated once.) Prerequisite: The corresponding subject matter course. The development and application of units of work in selected areas in the secondary school program.

607. Curriculum Problems in Home Economics. 3 hrs. A practicum for developing home economic curriculum materials for local schools.

610. Seminar in Home Economics Education. 1-6 hrs. Current trends and issues in home economics.

611. Evaluation in Home Economics. 3 hrs. Theory and practice of systematic evaluation of components of home economics programs, including occupational home economics.

612. Field Experience in Home Economics Related Occupations. 6 hrs. Supervised work experience in approved Home Economics Occupations. Can only be counted toward Occupational Certification and/or the Education Specialist degree.

615. Methods, Materials, and Information Technology in Home Economics. 3 hrs. Emphasis on new developments in teaching home economics, including computer technology.

691. Research. 1-4 hrs.

692. Special Problems in Home Economics Education. 1-4 hrs.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

798. Research Problem. 6 hrs. Selection of a practical educational problem using research and professional knowledge. A scholarly paper is required.

HOTEL, RESTAURANT AND TOURISM MANAGEMENT (HRT-818)

580. Hospitality Industry Accounting. 3 hrs. Prerequisite: Basic Accounting. Accounting principles applies to the hospitality industry. Financial statement analysis through case study. Managerial accounting emphasized.

582. Marketing of Hospitality and Travel Services. 3 hrs. Prerequisite: MKT 300. Analysis of the planning, developing, and marketing of food, lodging, and travel services.

583. Dimensions of Tourism. 3 hrs. Study of the components and forces which influence the international and domestic hospitality and travel industries.

590. International Studies in Hotel, Restaurant and Tourism Management. 3-6 hrs. Arr. Examination of hospitality, tourism, and food service industry via international lectures and field trips.

594. Tourism Destination Development. 3 hrs. Prerequisite: HRA 583 or permission of instructor. Study of community impact—positive adverse-of different tourism enterprises. Special emphasis on festivals and community events.

692. Special Problems in Hotel, Restaurant, and Tourism Administration. 1-3 hrs.

693. Readings in Hotel, Restaurant, and Tourism Administration. 1 hr. Recent developments in research related to the hospitality industry. May be repeated for a total of 3 hrs.

INDUSTRIAL AND VOCATIONAL EDUCATION (IVE-165)

500. Shop Planning and Equipment Selection. 3 hrs. A study of shop layout problems.

501. Management of the Vo Tech Learning Environment. 3 hrs. Organization and management of students, equipment, and physical facilities.

503. Design of the Vo Tech Instructional Program. 3 hrs. Occupational analysis based design and sequencing of instructional components and the development of appropriate support materials.

504. Problems of the Coordinator. 3 hrs. A study of the problems, procedures, techniques, etc., in the operation of part-time cooperative education.

521. Power Transmissions. 3 hrs. A study of mechanical, hydraulic, pneumatic and electrical power and transmission.

531. Philosophy and Principles of Vo Tech Instruction. 3 hrs. A methods course for teaching trade, technical and other vocational subjects.

532. Problems in Adult Education. 3 hrs. Methods and techniques in teaching adults in industrial education classes.

533. Curriculum Construction for Cooperative Education. 3 hrs. Objectives, content, and arrangement of units for teaching cooperative and evening classes.

534. VIDS Program Development I. 3 hrs. Curriculum development and counseling strategies for vocational special needs students.

535. Development of Vo Tech Instructional Materials. 3 hrs. Selection, development and use of instructional aids, with an emphasis on media production.

536. Delivery of the Vo Tech Instructional Program. 3 hrs. Learning theory based techniques of instructional delivery in the vocational classroom and laboratory.

537. Industrial Human Relations. 3 hrs. A study of human behavior and interpersonal dynamics within the industrial organization and environment. Primarily for industrial educators.

562. Computer Numerical Control Machining. 3 hrs. Advanced study of computer numerical control machining; programming, operations, application, maintenance and future developments. Hands-on CNC laboratory experience.

565. Microcomputers in Industrial/Vocational/Technical Education. 3 hrs. Skill development in the use of microcomputers and software appropriate to teaching and managing industrial, vocational, and technical education activities.

580. History and Philosophy of Vocational Education. 3 hrs. Objectives, principles, aims, and organization of programs in schools and colleges.

581. Evaluation of Vo Tech Student Performance. 3 hrs. Development and utilization of various measuring devices and techniques, statistical treatment of data, and grade assignments.

582. Industrial and Vocational Safety. 3 hrs. Analysis of fundamentals of accident prevention and their application in school shops.

583. Occupational Safety. 3 hrs. Organization and administration of safety programs including implementation of the Occupational Safety and Health Act. Primarily for industrial educators.

597. Interdisciplinary Seminar in Developmental Disabilities. 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.

604. Shop and Small Plant Design. 3 hrs. Problems in design of work stations, production lines, and materials control.

605. History of Industrial Education. 3 hrs. A study of leaders, movements, and agencies in the development of industrial education.

606. Philosophy of Industrial Arts Education. 3 hrs. A study and evaluation of the leading philosophies in the field.

607. Organization of Instructional Materials in Industrial Education. 3 hrs. A study of the development and utilization of various instructional materials.

611. Philosophy and Organization of Vocational Education. 3 hrs. Principles and development of vocational education under state and federal acts.

689. **Seminar in Industrial Education, I, II, III.** 2 hrs. May be taken three times.

692. **Special Problems in Industrial and Technical Education.** 1-3 hrs. Advanced individualized project relevant to the student's skill speciality.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

701. **Supervision of Vocational and Technical Education.** 3 hrs. A study of the problems of local directors and supervisors of vocational and technical education.

702. **Individualized Instruction in Vocational Technical Education.** 3 hrs. Foundations, principles, and techniques of teaching knowledge and skills on an individual basis.

703. **Contemporary Vocational and Technical Education Programs.** 3 hrs. A comparative analysis of contemporary and emerging programs in vocational education.

704. **Vocational Guidance and Placement.** 3 hrs. An overview of careers available through vocational and technical education, methods of student identification placement, and follow-up.

794. **Field Problem in Industrial and Vocational Education.** 3 hrs. Prerequisites: REF 601, REF 702, and approval of the major professor.

798. **Specialist Thesis.** 6 hrs. Utilizing research and professional knowledge in the solution of a practical educational problem. Scholarly paper required.

INDUSTRIAL ENGINEERING TECHNOLOGY (INT-395)

505. **Production and Inventory Control Systems.** 3 hrs. Principles of production and inventory planning and control. Forecasting techniques, EOQ, MRP, production scheduling, line balancing, CPM/PERT.

506. **Industrial Automation.** 3 hrs. Automation and its implications to industrial processes, economics, and interpersonal relations.

507. **Personnel in Technology.** 3 hrs. The procurement, development, and utilization of technical personnel.

508. **Innovations in Technology.** 3 hrs. Introduction to factors involved in technological change within an industrial operation.

509. **Plant Layout and Material Handling.** 3 hrs. Effectiveness of plant layout to the production activity involving personnel, materials, tools, and equipment.

510. **Human Factors.** 3 hrs. The discipline that tries to optimize the relationship between technology and the human.

540. **Alternate Energy Systems.** 3 hrs. Study of alternative sources of energy and power.

541. **Industrial Energy Management.** 3 hrs. Technical and economic aspects of industrial energy management, energy conservation techniques, and alternate energy sources.

576. **Electrical Safety in Industry.** 3 hrs. Electrical equipment safety. Injuries caused by electrical faults. Inspection and maintenance of electrical equipment.

577. **Fire Safety in Industry.** 3 hrs. Factors contributing to industrial fires. Chemistry and classification of fires. Fire extinguishers and water systems. Fire prevention.

580. **Industrial Simulation and Modeling.** 3 hrs. Prerequisite: CSS 240. Analysis of discrete-event systems in industry such as plant layouts, materials handling, production methods, and inventory control.

592. Special Problems. 1-3 hrs. Prerequisite: Senior standing and approval of adviser. Supervised study in selected areas.

JOURNALISM (JOU-212)

See Course Listing under **COMMUNICATION**.

LIBRARY SCIENCE (LS-170)

501. Introduction to Reference Resources and Services. 3 hrs. An introduction to reference materials, services, activities and functions as well as methods for locating information.

+ **505. Cataloging and Classification.** 3 hrs. Principles and methods of cataloging and classifying library materials. Provides practice in bibliographical description and subject analysis.

506. Advanced Cataloging and Classification. 3 hrs. Prerequisite: LS 505. Advanced study of the principles and methods of descriptive and subject cataloging and classification with attention to non-print materials.

511. Development of Library Collections. 3 hrs. Philosophy and principles governing the selection and procurement of all types of library materials, including the use of selection aids and bibliographic sources for developing both print and non-print collections.

+ **516. Utilization of Audiovisual Media and Equipment.** 3 hrs. A survey of media resources and equipment with an emphasis on utilization in libraries. Provides experience with equipment.

517. Literature and Related Media for Children. 3 hrs. A survey of children's literature, traditional and modern, and other related materials for use by and with children of grades 1-6.

518. Literature and Related Media for Adolescents. 3 hrs. Study of adolescent literature and other related materials for use by and with young people of grades 7-12.

525. Instructional Styles and Models in Media Programs. 3 hrs. The assessment of individualized styles and models of instruction in media programs and media centers.

526. Film and Television in Media Programs. 3 hrs. Selection, acquisition, organization, and utilization of film and television materials for service in media programs. Emphasis on familiarity with diverse film and television programming.

533. History of the Book. 3 hrs. A study of the origins and early development of books and printing in Western Europe and the Americas.

557. Microcomputers in Libraries. 3 hrs. Examine the various applications in which microcomputers are and will be utilized in different types of information centers and libraries.

580. British Studies: Studies in Librarianship. 3 hrs. Comparative studies of library and information-related institutions, bibliographic organization, models of service and professional practice in the United States and Great Britain.

581. British Studies: Seminar in Children's and Young Adult Literature. 3 hrs. Intensive study of specific topics of British interests in literature for children and adolescents.

582. British Studies: Information Centers and Special Libraries. 3 hrs. A survey of the resources and services provided by specialized information centers and libraries in corporate and governmental institutions in England.

585. British Studies: Information Systems. 3 hrs. Explores developments in the field of information processing systems in British installations.

586. British Studies: Historical Studies in Children's Literature. 3 hrs. Traces the development of children's literature in England and the United States to the early 20th Century.

587. **British Studies: Research.** 3 hrs. To provide the opportunity for in-depth research projects using the resources of metropolitan London.

590. **Instructional Television: Utilization and Production.** 3 hrs. Utilization of television in instructional settings. Emphasis on programming from Mississippi ETV and the use of portopac television equipment.

591. **Problems in School Library Media Center Administration.** 3 hrs. Intensive investigation of the current problems of school library media centers administration.

593. **Issues in Public Librarianship.** 3 hrs. Considers problems involved in the administration and supervision of public libraries. Emphasizes topics relevant to participants.

605. **Library Management.** 3 hrs. Analysis of administrative theory and principles of management in libraries.

609. **Administration of Media Centers.** 3 hrs. Survey of the problems in the management of media programs. Emphasis on organizing, staffing, financing, and use of evaluation standards.

620. **Trends in Instructional Technology.** 3 hrs. Survey of the historical aspects of instructional media. Application of research in the development of technology relating to libraries, classrooms, industry, and instructional settings.

621. **Selection and Organization of Media Resources.** 3 hrs. Prerequisite: LS 505 and 516. Selection, evaluation, and utilization of non-print materials and equipment. Introduction to communication theory.

+ 622. **Design and Production of Media Materials.** 3 hrs. Prerequisite: LS 516. Production of visual materials for utilization in instructional environments. Includes laboratory experience in projected media and the systems approach to designing visual products.

+ 623. **Advanced Media Production Techniques.** 3 hrs. Prerequisites: LS 516 or permission of the instructor. Instruction in the techniques of producing visual programs. Emphasis on specialized photographic and graphic techniques.

624. **Creative Library Programs for Children and Youth.** 3 hrs. Prerequisite: LS 517 or 518. Explores the development of creative visual forms and use of cultural resources in library services to children and adolescents.

628. **Storytelling.** 3 hrs. Prerequisite: LS 517 or 518. A study of oral tradition and folk literature with emphasis upon selection of stories and the art and techniques of storytelling. Provides practice in storytelling.

629. **Studies in Children's Literature.** 1-3 hrs. Prerequisite: LS 517. Advanced study and evaluation of children's literature and publishing trends in the field.

631. **History of Libraries.** 3 hrs. Development of libraries from ancient times to the present with special reference to the relationship of libraries to sociocultural, economic, and political trends.

633. **History of Books in Antiquity.** 3 hrs. Study of the development and uses of the book as an information transfer device from antiquity to the invention of the printing press. Includes the development of early records, the alphabet, paper, and binding. Emphasis is placed on the Western European book as an artifact of material culture.

634. **History of Children's Literature.** 3 hrs. Prerequisite: LS 517 or 518. Traces the development of children's literature in England and the United States to the early twentieth century.

636. **The Library in American Society.** 3 hrs. The library as a social institution, its background, and the forces that have shaped its development.

638. **History of Printing and Publishing.** 3 hrs. Study of the history of the book and book trade from Renaissance Europe until present day United States. Analysed and

discussed are the printing process, the spread of printing, and the development of publishing with an emphasis on trade and scholarly publishing. The technical, cognitive, aesthetic, and commercial dimensions of the book are presented within their historic contexts. Analogies between the printing and computer revolutions, and the impact of the computer on modern publishing are identified, developed, and discussed.

640. **Academic Libraries.** 3 hrs. The development and administration of the academic library.

641. **Public Libraries.** 3 hrs. The development and administration of the public library. Problems in public library services.

642. **Special Libraries.** 3 hrs. The development and administration of the special libraries serving businesses, institutions, and government agencies.

643. **Serial Publications.** 3 hrs. Examines serial publications and the tools useful in their bibliographic control: includes history, acquisition, processing, cataloging storage, and administration.

646. **Special Collections and Archives.** 3 hrs. Prerequisites: LS 501 and 505. The acquiring, processing, servicing, and management of collections composed of rare books, manuscripts, archival papers, oral history files, and other special materials.

647. **Introduction to Archival Organization.** 3 hrs. Basic instruction in handling materials of archival significance, and on the development of the archives-library relationship.

648. **Archival Practicum.** 2-4 hrs. Prerequisite: LS 647. Provides an opportunity for supervised practice in special collections and archival operations.

649. **Preservation of Documentary Materials.** 3 hrs. The care and preservation of documentary materials in their various formats including techniques for conservation, preservation, and restoration.

651. **Introduction to Information Science.** 3 hrs. Survey of information science as a field of study; the role of major information and documentation centers.

654. **Library Automation.** 3 hrs. Study of the theory of computer programming and its application to the solution of the library problems.

655. **On-Line Systems: Technical Services.** 3 hrs. Prerequisite: LS 505. Coverage of the technical service aspects of OCLC (an online computer library center), WLH (Washington Library Network), and RLIH (Research Library Information Network).

656. **On-Line Systems: Public Services.** 3 hrs. Prerequisite: LS 501. Coverage of the numerous online data bases which currently provide access to scholarly published literature.

663. **Subject Bibliography.** 3 hrs. Prerequisite: LS 501. An evaluation of information resources in various subject fields with emphasis on characteristics of subject literatures, problems of use, and bibliographical control and organization.

664. **Government Publications.** 3 hrs. Prerequisite: LS 501. Study of the types of government publications and tools for their bibliographic organization.

665. **Bibliography of the Humanities.** 3 hrs. Prerequisite: LS 501. Study, evaluation, and utilization of information resources in the humanities.

666. **Bibliography of the Social Sciences.** 3 hrs. Prerequisite: LS 501. Study, evaluation, and utilization of library and information resources in the social sciences.

667. **Bibliography of Science and Technology.** 3 hrs. Prerequisite: LS 501. Study, evaluation, and utilization of information resources in the pure and applied sciences.

668. **Research Methods in Library Science.** 3 hrs. Survey of scientific research methods and their application to the field of library and information science.

675. **Seminar in the Organization of Materials.** 3 hrs. Prerequisites: LS 505 and LS 506. An examination of the historical, theoretical, and practical aspects of processing

information through an analysis of descriptive and subject techniques (schemes and lists) with emphasis on the Library of Congress Classification.

689. **Library Practicum.** 2-4 hrs. Prerequisite: Permission of the practicum coordinator.

691. **Research in Library Science.** 1-16 hrs. Prerequisite: Permission of Director.

692. **Special Problems in Librarianship.** 1-3 hrs. A problem study to be approved by the Director.

694. **Field Problems.** 3 hrs. Prerequisite: Permission of Director. Practical experiences in dealing with problem situations in the field and related institutional settings.

695. **Master's Project.** 2 hrs. A written project dealing with a specific problem or issue in the field of library and information studies under faculty supervision.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. Credit not recorded until thesis is accepted by the major professor.

702. **Bibliography for Music Research.** 3 hrs. Prerequisite: LS 501. An extensive examination of research materials, including music and non-music reference works.

MANAGEMENT (MGT-620)

500. **Management Theory.** 3 hrs. An analysis of managerial functions, concepts, and practices within organizations. See also MBA 500.

598. **International Management Seminar Abroad.** 3 hrs. Prerequisite: Consent of Program Director. A series of lectures and discussions involving authorities on international management issues and practices.

610. **Organizational Management.** 3 hrs. Prerequisites: MBA 500 or the equivalent. Applications of analytical and communication skills in solving complex management problems. See also MBA 610.

620. **Organizational Behavior and Practice.** 3 hrs. Prerequisite: MGT 360 or consent of instructor. Study and skill-building in interpersonal and small-group relationships as found in various organizations.

630. **Survey of Labor-Management Relations.** 3 hrs. Prerequisite: MGT 360 or consent of instructor. A survey of the development of labor law and collective bargaining.

640. **Advanced Personnel Administration.** 3 hrs. Prerequisite: MGT 364 or consent of instructor. An in-depth study of U.S. and international human resource administration.

645. **International Management.** 3 hrs. Prerequisite: MGT 360 or consent of instructor. A case course of comparisons of problems in Management in the U.S. with those of other countries.

669. **Behavioral Dynamics in Organizations.** 3 hrs. Prerequisite: MGT 360 or consent of instructor. An experiential study of behavioral dynamics in organizations; development of knowledge of behavioral systems and skills in the application and use of the knowledge in work situations.

692. **Special Problems in Management.** 3 hrs. Prerequisite: Permission of department chair.

699. **International Management Research Abroad.** 3 hrs. Prerequisite: Consent of Program Director. A research course in international management required for any student enrolled in MGT 598.

MANAGEMENT INFORMATION SYSTEMS (MIS-630)

580. **Management Information Systems.** 3 hrs. Prerequisite: Computer literacy. An analysis of the impact of information systems and technology on organizations. See also MBA 580.

MANUFACTURING TECHNOLOGY (MFG-389)

610. **Advanced Quality Control and Reliability.** 3 hrs. Techniques and tools in quality assurance; management of quality as a system; computers in quality control; quality circles; statistical process control; reliability; Taguchi method.

620. **Manufacturing Resources.** 3 hrs. Study of forecasting models; production and inventory control systems; MRP II; just-in-time techniques of inventory control.

630. **Advanced Manufacturing Systems.** Study of manufacturing as a system; economics; optimization of machining; modern production processes; tool and work materials (diamonds, composites and ceramics).

640. **CAD/CAM Technology.** 3 hrs. CAD/CAM techniques utilizing micro-computers and modern CAD/CAM software; solid modeling; finite element analysis; design for manufacturing, including assembly.

650. **Plant Engineering Technology.** 3 hrs. Manufacturing facility as operating system; plant and preventive maintenance; signature analysis; health and safety at workplace; quality of worklife; utilities management.

660. **Computer Integrated Manufacturing.** 3 hrs. CIM concept and technology; FMS, CAPP, GT; data communication and networks; data base management/systems; management and human resources issues; factory of the future.

680. **Manufacturing Seminar.** 1 hr. Discussion of modern manufacturing topics of interest; participation through presentation and attendance required; not to be counted as credit toward degree.

691. **Research in Manufacturing Technology.** 1-9 hrs. Investigation of current research and literature in manufacturing; development of writing skills; a published research paper or a major report as end product.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. Prerequisites: Consultation with and permission of major professor.

MARINE SCIENCE (MAR-322)

501. **Biological Marine Science.** 3 hrs. Marine biological regimes and the influence of geological, physical, and chemical oceanographic features.

501-L. **Biological Marine Science Laboratory.** 1 hr. A laboratory for MAR 501.

502. **Marine Environmental Science.** 3 hrs. A study of the problems that affect the coastal and nearshore environments of the Gulf of Mexico.

503. **Marine Invertebrate Zoology.** 3 hrs. Morphology, distribution and ecology of the phyla from Protozoa through Protochordates. May be taken as BSC 521.

503-L. **Marine Invertebrate Zoology Laboratory.** 3 hrs. Corequisite for MAR 503. May be taken as BSC 521-L.

504. **Parasites of Marine Animals.** 3 hrs. Prerequisite: Permission of instructor. Emphasis on morphology, taxonomy, life histories, and host-parasite relationships. May be taken as BSC 524.

504-L. Parasites of Marine Animals Laboratory. 3 hrs. Corequisite for MAR 504. May be taken as BSC 524-L.

505. Marine Ecology. 3 hrs. The relationship of marine organisms to their environment. May be taken as BSC 539.

505-L. Marine Ecology Laboratory. 2 hrs. Corequisite for MAR 505. May be taken as BSC 539-L.

506. Fauna and Faunistic Ecology of Tidal Marshes. 1 hr. Taxonomy, distribution, trophic relationships, reproductive strategies and adaption of tidal marsh animals. May be taken as BSC 548.

506-L. Fauna and Faunistic Ecology of Tidal Marshes Laboratory. 3 hrs. Corequisite for MAR 506. May be taken as BSC 548-L.

507. Marine Aquaculture. 3 hrs. Problems and procedures relating to the culture of commercially important crustaceans, fish, and mollusks. May be taken as BSC 547.

507-L. Marine Aquaculture Laboratory. 3 hrs. Corequisite for MAR 507. May be taken as BSC 547-L.

508. Marine Ichthyology. 3 hrs. Lecture and laboratory survey of marine chordates, including fishes, reptiles, mammals, and shore birds.

508-L. Marine Ichthyology Laboratory. 3 hrs. Corequisite for MAR 508.

509. Marine Microbiology. 3 hrs. Prerequisite: General Microbiology. An introduction to the role of microorganisms in the overall ecology of the oceans and estuaries. May be taken as BSC 590.

509-L. Marine Microbiology Laboratory. 2 hrs. Corequisite for MAR 509. May be taken as BSC 590-L.

510. Marine Fisheries Management. 2 hrs. Prerequisite: Statistics recommended. A statistical review of the world fisheries. May be taken as BSC 549.

510-L. Marine Fisheries Management Laboratory. 2 hrs. Corequisite for MAR 510. May be taken as BSC 549-L.

520. Marine Phycology. 2 hrs. Prerequisites: General botany and plant taxonomy. A survey of the principal groups of marine algae. May be taken as BSC 527.

520-L. Marine Phycology Laboratory. 2 hrs. Corequisite for MAR 520. May be taken as BSC 527-L.

521. Coastal Vegetation. 2 hrs. A study of general and specific aspects of coastal vegetation, with emphasis on local examples. May be taken as BSC 537.

521-L. Coastal Vegetation Laboratory. 1 hr. Corequisite for MAR 521. May be taken as BSC 537-L.

522. Salt Marsh Plant Ecology. 2 hrs. The botanical aspects of marshes; includes plant identification, composition, and structure. May be taken as BSC 538.

522-L. Salt Marsh Plant Ecology Laboratory. 2 hrs. Corequisite for MAR 522. May be taken as BSC 538-L.

530. Comparative Histology of Marine Organism. 3 hrs. Histology of marine organisms, including tissue processing techniques. May be taken as BSC 569.

530-L. Comparative Histology of Marine Organism Laboratory. 3 hrs. Corequisite for MAR 530. May be taken as BSC 569-L.

541. Chemical Marine Science. 3 hrs. Prerequisites: BSC 111, CHE 352, MAT 179 or permission of instructor. Sea water chemistry and cycles and their impact on the marine environment.

541-L. Chemical Marine Science Laboratory. 1 hr. A laboratory designed to accompany MAR 541. Concurrent registration in MAR 541 is required.

556. Techniques in Marine Science Education. 3 hrs. Prerequisite: Permission of instructor. Designed to acquaint teachers with the marine resources of the Mississippi Coastal Zone. May be taken as SCE 556.

557. Marine Science for Teachers. 3 hrs. Prerequisite: Permission of instructor. Emphasis will be placed on measurements and analysis of the marine habitat and ecological relationships. May be taken as SCE 557.

558. Marine Science for Elementary Teachers. 3 hrs. Prerequisite: Permission of instructor. Designed to acquaint teachers with marine science concepts. May be taken as SCE 535.

561. Physical Marine Science. 3 hrs. Prerequisites: PHY 102, 106 or 202 and MAT 179. Can be taken as PHY 571.

561-L. Physical Marine Science Laboratory. 1 hr. Corequisite: MAR 561 or PHY 571.

562. Physical Oceanography I. 3 hrs. Prerequisite: MAR 461 or MAR 561. Can be taken as PHY 510.

563. Physical Applications of the Fourier Transform. 3 hrs. Prerequisites: MAT 280 and PHY 202. Applications of the fourier transform to measurements in physics. (May be taken as PHY 451)

566. Acoustics. 3 hrs. Prerequisites: MAT 471, permission of instructor. Principles of the generation, transmission and reception of acoustic waves. May be taken as PHY 546.

581. Geological Marine Science. 3 hrs. Prerequisite: GLY 101, 103 or permission of instructor. Study of the formation and deformation of the oceanic crust and the distribution and character of marine sediments.

581-L. Geological Marine Science Laboratory. 1 hr. Pre- or corequisite: MAR 581. Examination and interpretation of marine geological samples and data.

582. Coastal Marine Geology. 3 hrs. Prerequisites: 12 credit hours in geology. A study of inshore and nearshore geological processes, sedimentation patterns and landform development. May be taken as GLY 531.

590. Special Problems in Marine Science. 1-6 hrs. Prerequisite: Consent of instructor. Independent research.

591. Special Topics in Marine Science. 1-6 hrs. Prerequisite: Consent of instructor. Directed study in area for which no formal courses are offered.

604. Early Life History of Marine Fishes. 2 hrs. Reproductive strategies and early developmental processes of marine fishes. May be taken as BSC 604.

604-L. Early Life History of Marine Fishes Laboratory. 2 hrs. Corequisite for MAR 604. May be taken as BSC 604-L.

644. Marine Mineral Deposits. 3 hrs. Prerequisite: Permission of instructor. Genesis and mode of occurrence of continental shelf and deepsea mineral deposits. May be taken as GLY 686.

650. Coastal Marine Chemistry. 3 hrs. Prerequisite: Consent of instructor. Examination of oceanic phenomena of the coastal ocean and estuarine zone from a chemical perspective.

651. Marine Organic Geochemistry. 3 hrs. Prerequisite: MAR 541 or permission of instructor. Geochemical cycles of organic compounds in the marine environment.

669. Wave-Current Interactions with Applications to Remote Sensing. 3 hrs. An introductory study of different approaches to wave-current interactions, their underlying assumptions and their effects on remote sensing and on upper ocean dynamics.

682. Special Topics in Biological Marine Science. 1-9 hrs. Prerequisite: permission. Study of a selected area in biological marine science. May be repeated.

683. Special Topics in Chemical Marine Science. 1-9 hrs. Prerequisite: permission. Study of a selected area in chemical marine science. May be repeated.

684. Special Topics in Geological Marine Science. 1-9 hrs. Prerequisite: permission. Study of a selected area in geological marine science. May be repeated.

685. Special Topics in Physical Marine Science. 1-9 hrs. Prerequisite: permission. Study of a selected area in physical marine science.

689. Seminar in Marine Science. 1 hr. Prerequisite: Permission of instructor. Current topics in marine science explored via student discussion and presentation. May be repeated.

691. Directed Research in Marine Science. 1-16 hrs. Prerequisite: permission. Independent research conducted under the direction of a faculty member. May be repeated.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis in Marine Science. 1-6 hrs. Prerequisite: Permission of instructor.

791. Directed Research in Marine Science. 1-12 hrs. Prerequisite: Approval of the major professor.

797. Independent Study and Research. Hrs. arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

898. Dissertation in Marine Science. 1-12 hrs. Prerequisite: Approval of major professor.

MARKETING (MKT-625)

550. Marketing Foundations. 3 hours. An analysis of marketing functions, concepts, and practices in managerial decision making. See also MBA 550.

566. Services Marketing. 3 hrs. Prerequisites: MKT 300 and Graduate status. An examination of the identifying characteristics of services marketing as compared and contrasted to product marketing.

595. International Marketing. 3 hrs. Prerequisites: MKT 300 and Graduate status. The economic, political, and cultural aspects of international business operations.

598. International Marketing Seminar Abroad. 3 hrs. Prerequisite: Consent of Program Director. Conducted in London, England: a series of lectures and discussions involving authorities on international marketing issues and practices.

605. Problems in Marketing Management. 3 hrs. Prerequisite: MKT 550 or the equivalent. Applications of analytical and communication skills in solving complex marketing problems. See also MBA 605.

635. Seminar in Consumer Behavior. 3 hrs. Prerequisite: MKT 300. Application of behavioral science concepts to research and marketing decisions.

640. Marketing Planning. 3 hrs. Prerequisite: MKT 300. An applications-oriented approach to strategic and operational marketing problems.

650. Seminar in Marketing Research. 3 hrs. Prerequisites: ECO 302 and MKT 300. A study of advanced research techniques used in market analysis.

692. **Special Problems in Marketing.** 3 hrs. Consent of the chair of the Marketing Department is required prior to registration.

699. **International Marketing Research Abroad.** 3 hrs. Prerequisite: Consent of Program Director. A research course in international marketing required for any student enrolled in MKT 598.

MASTER OF BUSINESS ADMINISTRATION (MBA-613)

500. **Management Theory.** 3 hrs. An analysis of managerial functions, concepts, and practices within organizations. See also MGT 500.

511. **Financial Accounting.** 3 hrs. Prerequisite: Computer literacy. Fundamentals of accumulating, reporting, and interpreting financial accounting information for internal and external uses. See also ACC 511.

520. **Managerial Economics.** 3 hrs. Prerequisites: Computer literacy; calculus. An examination of microeconomic theory as applied to managerial decision making. See also ECO 520.

530. **Statistics for Managers.** 3 hrs. Prerequisite: Computer literacy. An examination of statistical techniques as applied to managerial decision making.

545. **Communication Skills for Managers.** 1.5 hrs. Prerequisite: Admission to MBA program. A course designed to develop communication skills as they relate to managerial effectiveness.

546. **Legal Environment of Management.** 1.5 hrs. A survey of the major legal considerations affecting managerial decision making.

550. **Marketing Foundations.** 3 hrs. An analysis of marketing functions, concepts, and practices in managerial decision making. See also MKT 550.

560. **Managerial Accounting.** 3 hrs. Prerequisite: MBA 511. An analysis of the use of accounting information in managerial decision making. See also ACC 560.

570. **Managerial Finance.** 3 hrs. Prerequisites: Computer literacy; MBA 511. A study of financial analysis in managerial decision making. See also FIN 570.

580. **Management Information Systems.** 3 hrs. Prerequisite: Computer literacy. An analysis of the impact of information systems and technology on organizations. See also MIS 580.

585. **Integrative Management.** 1.5 hrs. Prerequisites: Admission to MBA program and permission of CBA dean. An analysis of strategies and decision making using case studies to integrate all business functions.

600. **Business and Society.** 3 hrs. Prerequisite: Permission of CBA Dean. An examination of internal and external factors influencing decision making with an emphasis on ethics, civic responsibility, social responsiveness, and professional values.

605. **Problems in Marketing Management.** 3 hrs. Prerequisite: MBA 550 or the equivalent. Applications of analytical and communication skills in solving complex marketing problems. See also MKT 605.

610. **Organizational Management.** 3 hrs. Prerequisite: MBA 500 or the equivalent. Applications of analytical and communication skills in solving complex management problems. See also MGT 610.

620. **Macroeconomic Analysis for Managers.** 3 hrs. Prerequisites: MBA 520; MBA 530. An examination of the use of macroeconomic analysis and information in managerial decision making.

630. **Operations Management.** 3 hrs. Prerequisite: MBA 585. An analysis of modern operations management in terms of efficiency, productivity, quality, and service to the customer.

640. **Problems in Corporate Finance.** 3 hrs. Prerequisite: MBA 570. Applications of financial theory to complex financial problems.

650. Business Modeling. 3 hrs. Prerequisite: MBA 585. An examination of the theory and applications of formal models in managerial decision making.

660. Managerial Strategy and Planning. 3 hrs. Prerequisite: Permission of the CBA Dean. An analysis of strategic business planning and implementation from the perspective of top management.

685. Managing in a Global Environment. 1.5 hrs. Prerequisites: MBA 620 and MBA 640. An analysis of the global environment and its implications for managerial decision making.

686. Federal Taxes and Management Decisions. 1.5 hrs. Prerequisite: MBA 560. An analysis of federal tax concepts with an emphasis on tax planning.

MATHEMATICS (MAT-350)

508. Mathematical Foundations for Inservice Elementary School Teachers. 3 hrs. Numeration, place value, intuitive geometry, measurement, arithmetic algorithms.

509. Mathematical Foundations for Inservice Middle School Teachers. 3 hrs. Intuitive geometry, integers, rational numbers, probability, graphing, metric system, word problems.

510. Mathematics for Teachers of Junior High School Mathematics. 3 hrs. The real number system and major subsystems, introduction to algebra, informal geometry, consumer mathematics and introduction to BASIC programming. (Open only to elementary and special education majors).

515. Introduction to Differential Equations II. 3 hrs. Prerequisite: MAT 385. Systems of linear differential equations, characteristic equations, operator methods, approximating solutions, Laplace transforms.

517. Introduction to Partial Differential Equations. 3 hrs. Prerequisite: MAT 280 and 385. Integrability conditions, quasilinear and linear equations, applications to physics, classification of second order equations and canonical forms, separation of variables.

+518.* **Linear Programming.** 3 hrs. Prerequisite: MAT 326. Convex sets, linear inequalities, extreme-point solutions, simplex procedure, applications.

+519.* **Optimization in Mathematical Programming.** 3 hrs. Prerequisites: MAT 280 and MAT 418. Selected topics in optimization from linear and nonlinear programming.

520. Statistics and Probability. 3 hrs. Prerequisites: MAT 280 and MAT 340. Random variables, probability functions, independent events, conditional probability, expectation, hypothesis testing.

* Students will use University computers and appropriate software as a part of course requirements.

521. Number Theory. 3 hrs. Prerequisite: MAT 340. Induction, well ordering, division algorithm, Euclidean algorithm, Fundamental Theorem of Arithmetic, number theoretic functions, congruences.

523. Modern Algebra I. 3 hrs. Prerequisite: MAT 340. Elementary notions in groups, Fundamental Theorem of Finitely Generated Groups, permutation groups, quotient groups, the isomorphism theorems, applications of transformation groups.

524. Modern Algebra II. 3 hrs. Prerequisite: MAT 423. Survey of standard algebraic systems: rings, integral domains, fields, modules, polynomial rings, quotient rings, fields of quotients.

526. Linear Algebra II. 3 hrs. Prerequisite: MAT 326. Determinants polynomials; complex numbers; single linear transformations; orthogonal, unitary, and symmetric linear transformations.

536. Theory of Functions of a Complex Variable I. 3 hrs. Prerequisite: MAT 280. Complex numbers and functions, limits, continuity, differentiation, analytic functions, branches, contour integration, series.

537. Graph Theory. 3 hrs. Prerequisite: MAT 340. An introduction to graphs and a sampling of their numerous and diverse applications.

539. Combinatorics. 3 hrs. Prerequisites: MAT 326, 340, and 169 or 179. Counting and enumeration techniques, inversion formulas and their applications, and counting schemata relative to permutations of objects.

541. Advanced Calculus I. 3 hrs. Prerequisites: MAT 280, MAT 340. Point set theory, sequences, continuity, uniform continuity, limits, mean value theorems, L'Hospital's rule.

542. Advanced Calculus II. 3 hrs. Prerequisite: MAT 441. Riemann integration, Taylor's theorem, improper integrals, infinite series, uniform convergence.

543. Advanced Calculus III. 3 hrs. Prerequisite: MAT 542 or permission of instructor. Vector-valued functions of several variables, to include Inverse and Implicit Function Theorems, multiple integrals, line and surface integrals.

560.* Numerical Analysis I. 3 hrs. Prerequisites: MAT 280, MAT 326, knowledge of a programming language. Methods of solving equations and systems of equations, error analysis, difference equations.

561.* Numerical Analysis II. 3 hrs. Prerequisites: MAT 385, MAT 460. Interpolating polynomials, numerical differentiation and integration, numerical solutions of differential equations, roundoff error.

572. Modern Geometry. 3 hrs. Prerequisite: MAT 280, 316 or 326, and 340. Heuristic and analytic treatment of a branch of modern geometry, such as projective or differential geometry.

573. Metric Spaces. 3 hrs. Prerequisite: MAT 340. Continuity, Hausdorff and countability axioms, products, Euclidean spaces, connectedness, compactness, Heine-Borel and Bolzano-Weierstrass theorems.

575. General Topology I. 3 hrs. Prerequisite: MAT 169 or 179, and MAT 340. General topological spaces, bases and subbases, continuity.

576. General Topology II. 3 hrs. Prerequisite: MAT 475. Connectedness, separation axioms, countability axioms, compactness, metrizability.

588. Mathematics for Inservice Secondary School Teachers I. 1-3 hrs. Prerequisites: 24 hours of mathematics excluding pre-calculus courses, secondary mathematics teaching experience. Special mathematical topics for inservice secondary school mathematics teachers, to include algebra, number theory, graph theory, and combinatorics.

589. Mathematics for Inservice Secondary School Teachers II. 1-3 hrs. Prerequisites: 24 hours of mathematics excluding pre-calculus courses, secondary mathematics teaching experience. Special mathematical topics for inservice secondary school mathematics teachers, to include probability theory, analysis, applied mathematics, topology, geometry.

592. Special Problems I, II. 1-3 hrs. each.

601. Differential Geometry I. 3 hrs. Prerequisite: MAT 431. An introduction to the theory of plane curves, space curves, and surfaces.

603. Modern Algebra. 3 hrs. Prerequisite: MAT 424. Simple groups, solvable groups, the Sylow theorems, presentations of groups, category terminology, introductory homological algebra.

605. Ordinary Differential Equations. 3 hrs. Prerequisite: MAT 415. Topics from the theory of ordinary differential equations. Specific topics to be selected by the instructor.

606. Partial Differential Equations. 3 hrs. Prerequisite: MAT 417. Dirichlet, Neumann, and mixed boundary value problems; classical techniques of solution of partial differential equations & applications.

629. Applied Combinatorics and Graph Theory. 3 hrs. Prerequisite: CSC 616 or permission of instructor. Combinatorial/graphical techniques for complexity analysis,

recurrence relations, Polya theory, NP complete problems. May also be taken as CSC 629.

636. Functions of a Complex Variable II. 3 hrs. Prerequisite: MAT 436. Taylor and Laurent series, residue calculus, conformal mapping with applications, integral formulas of the Poisson type, analytic continuation.

637. Functions of a Complex Variable III. 3 hrs. Prerequisite: MAT 636. A continuation of MAT 636.

641. Functions of a Real Variable I. 3 hrs. Prerequisite: MAT 442. Foundations of real analysis and introduction to Lebesgue integration.

642. Functions of Real Variable II. 3 hrs. Prerequisite: MAT 641. Continuation of MAT 641.

675. Topology. 3 hrs. Prerequisite: MAT 476. Properties of topological spaces such as imbedding and extension theorems, metrizable and compactification.

681. Topics in Algebra I, II, III. 3 hrs. Prerequisites: MAT 423 and permission of instructor. May be repeated for a maximum of nine hours credit.

682. Topics in Analysis I, II, III. 3 hrs. Prerequisite: Permission of instructor. May be repeated for a maximum of nine hours credit.

683. Topics in Topology and Geometry I, II, III. 3 hrs. Prerequisite: Permission of instructor. May be repeated for a maximum of nine hours credit.

684. Topics in Applied Mathematics I, II, III. 3 hrs. Prerequisite: Permission of instructor. May be repeated for a maximum of nine hours credit.

689. Mathematics Seminar I, II 3 hrs. Prerequisite: Permission of instructor. Six hours of seminar are required for the M.S. degree in Mathematics.

691. Research in Mathematics. 1-16 hrs. Does not count toward the minimum 33-semester hour degree requirement.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs.

MATHEMATICS REFRESHER AND ENRICHMENT PROGRAM

(M-REP 350)

582. Precalculus Review I. 1-3 hrs. A review of topics from elementary, intermediate, and advanced algebra, with an emphasis upon applications relevant to the high school curriculum.

583. Precalculus Review II. 1-3 hrs. Prerequisite: MAT 582 or permission of instructor. A review of topics from trigonometry and elementary functions, with an emphasis upon applications relevant to the high school curriculum.

584. Calculus Review I. 1-3 hrs. Prerequisite: MAT 583 or permission of instructor. A review of topics from single-variable calculus to include limits, continuity, derivatives, and integration, with applications relevant to the high school curriculum.

585. Calculus Review II. 1-3 hrs. Prerequisite: MAT 584 or permission of instructor. A review of topics from single-variable calculus to include methods of integration, L'Hospital's rule, improper integrals, infinite series and vectors, with applications relevant to the high school curriculum.

586. Geometry Review for High School Teachers. 1-3 hrs. May be repeated for a maximum of 6 semester hours. Topics from Euclidean geometry, transformational geometry, plane analytic geometry, and topology.

587. Problem Solving in School Mathematics. 1-3 hrs. Prerequisite: MAT 585 or permission of instructor. May be repeated for a maximum of 6 semester hours. Includes strategies for solving both standard and non-standard mathematical problems.

MECHANICAL ENGINEERING TECHNOLOGY (MET-397)

520. Robotics. 3 hrs. Fundamentals of hydraulic, pneumatic, and electrically-controlled industrial robots. Robot geometry, installation and applications in industrial processes.

544. Solar Heating and Cooling. 3 hrs. Solar energy conversion methods; collectors; residential, commercial solar heating and cooling. Economics of solar energy. Total energy systems.

544-L. Solar Heating and Cooling Laboratory. 1 hr.

592. Special Problems. 1-3 hrs. Prerequisite: Senior standing and approval of faculty adviser.

MEDICAL TECHNOLOGY (MTC-354)

500. Applied Clinical Procedures. 1 hr. Corequisite: First MTC 300 level course or permission of instructor. A lecture emphasizing clinical laboratory safety, instrumentation, mathematics, and analytical techniques.

500-L. Applied Clinical Procedures Laboratory. 2 hrs. Corequisite: First MTC 300 level course or permission of instructor. A laboratory emphasizing clinical laboratory safety, instrumentation, mathematics, and analytical techniques.

504. Advanced Clinical Chemistry I. 3 hrs. Prerequisite: CHE 251 and 321 or permission of instructor. The Chemical Analysis of Body Fluids-Research emphasis.

509. Advanced Clinical Chemistry II. 4 hrs. Prerequisite: MTC 504 or permission of the instructor. The chemical analysis of body fluids - research emphasis.

561. Oncology. 3 hrs. An introduction to the biological and clinical aspects of cancer.

689. Medical Technology Seminar. 1 hr. Presentation of current material related to clinical medicine.

692. Special Problems in Medical Technology. 2-8 hrs. Individuals will be assigned some specific clinical problem in medical technology to investigate under faculty direction.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs.

MUSIC (MUS-675)

500. Music in Italy Today. 3 hrs. Prerequisite: Approval of instructor. A contemporary view of opera, orchestra, instrumental/chamber, and film music examining Italy's historical musical heritage in terms of its impact on current artistic trends.

511. Music for Film, Radio/Television, and Theater. 3 hrs. Prerequisite: Permission of instructor. A theoretical and practical study of the usage of music in Film, Radio/Television, and Theater.

515. Music Scoring for Film, Radio/Television, and Theater. 3 hrs. Prerequisite: Permission of instructor. A study of original music composition as it pertains to Film, Radio/Television, and Theater.

531. History of Opera. 3 hrs. The history of musical theatre from Greek drama to present. Open to non-music majors with permission of instructor.

532. **American Music.** 3 hrs. A study of the development of music in North America. Open to non-music majors with permission of instructor.

533. **20th Century Music.** 3 hrs. Examination of music trends since Debussy and Mahler. Open to non-music majors with permission of instructor.

534. **Ancient, Medieval, and Renaissance Music.** 3 hrs. A study of the rise of music in the ancient world, the beginning of western music and of polyphony. Open to non-music majors with permission of instructor.

535. **Baroque Music.** 3 hrs. The development of musical styles and forms from Monteverdi through J.S. Bach. Open to non-music majors with permission of instructor.

536. **18th Century Music.** 3 hrs. The development of classical styles and forms, emphasis on *style galant*, *empfindsamer stil* and the Viennese classicists. Open to non-music majors with permission of instructor.

537. **19th Century Music.** 3 hrs. The development of musical romanticism, emphasis on the expansion of classical forms, and the appearance of new stylistic concepts. Open to non-music majors with permission of instructor.

539. **Diction.** 3 hrs. Systematic introduction to phonetics of various foreign languages as applied to singing. May be taken for a total of six (6) hours. The second registration permitted only into a section in which the languages emphasized are different.

540. **Vocal Literature.** 2 hrs.

541. **Vocal Literature.** 2 hrs. A continuation of MUS 540.

542. **Keyboard History and Literature I.** 3 hrs. The history and literature of keyboard music from pre-Baroque times through the works of Beethoven.

543. **Keyboard History and Literature II.** 3 hrs. The history and literature of keyboard music after Beethoven to the present.

544. **Organ Literature.** 2 hrs.

545. **Organ Literature.** 2 hrs. A continuation of MUS 544.

546. **Instrumental Literature.** 2 hrs.

547. **Instrumental Literature.** 2 hrs. A continuation of MUS 546.

548. **Choral Literature I.** 3 hrs. A survey of choral literature from Gregorian chant through the Baroque period. Study will include materials suitable for school and church choirs as well as standard masterworks.

549. **Choral Literature II.** 3 hrs. A survey of choral literature from the Classical period to the present. Study will include materials suitable for school and church choirs as well as standard masterworks.

550. **Symphonic Literature.** 3 hrs. A history of and literature for the symphony orchestra from 1600 to the present. Open to non-music majors with permission of instructor.

551. **Chamber Music.** 3 hrs. A survey of music for small instrumental ensembles. Open to non-music majors with permission of instructor.

559. **Church Music Colloquium.** 3 hrs. Philosophies of church music as well as the administration, liturgies, and related materials will be studied.

562. **Hymnology.** 3 hrs. The history of the Christian hymn from its roots to present-day form.

571. **Seminar in Masterpieces of Music.** 3 hrs. Prerequisite: MUS 232 or consent of instructor. A thorough exploration of major compositions from all musical media. May be taken two times. May be taken by non-music majors with the consent of instructor.

599. **British Studies: Music in Britain Today.** 3 to 6 hrs.

620. **Music Theory Survey.** 3 hrs. A survey of harmonic, melodic, and rhythmic elements of tonal music. Will not apply towards a degree for students with a composition emphasis.

630. Music History Survey. 3 hrs. A survey of the major periods of the history of music with emphasis on significant works. Sources useful in the investigation of music are surveyed.

692. Special Problems, I, II, III. 1-3 hrs. each. Investigation of specialized areas of interest.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs.

702. Bibliography for Music Research. 3 hrs. An extensive examination of research materials, including music and non-music reference works.

711. Pedagogy of Theory. 3 hrs. A course in the teaching of music theory in the senior high school as well as the college level.

712. Seminar in Composition. 3 hrs. A composition class for non-composition majors.

713. Seminar in Music Theory. 2 hrs. For theory and composition majors; open to others with permission of instructor.

714. Composition Project. 6 hrs. Open to students with a major in theory and composition.

715. Recital. 1-3 hrs. Prerequisite: Permission of music performance studies instructor and approval by the major professor.

721. Analytical Techniques. 3 hrs. A course designed to develop technique in analysis of music from the time of early polyphony through the Baroque period.

722. Analytical Techniques. 3 hrs. A course designed to develop techniques in analysis of music in the Classical and Romantic periods.

723. Seminar in 20th Century Compositional Techniques. 3 hrs. A seminar in techniques utilized by composers in the 20th century. Emphasis will be placed on analysis of selected works.

724. Pre-Baroque Counterpoint. 2 hrs. Contrapuntal writing up to eight parts. Prerequisite: MUS 321 or permission of instructor.

725. Tonal Counterpoint. 2 hrs. Contrapuntal writing culminating in the fugue. Prerequisite: MUS 322 or permission of instructor.

727. Advanced Orchestration. 3 hrs. May be taken three times. Prerequisites: MUS 401 or permission of instructor.

728. Preparation and Publication of Music. 3 hrs. A course designed to acquaint students with problems involved in preparing music for professional purposes.

731. Seminar in Performance Practices I. 3 hrs. A study of the conductor's and performer's problems in the interpretation and performance of vocal and instrumental music of the 17th and 18th centuries.

732. Seminar in Performance Practices II. 3 hrs. A study of the conductor's and performer's problems in the interpretation and performance of vocal and instrumental music of the 19th and 20th centuries.

740. Seminar in Solo Vocal Literature. 3 hrs. Study of selected song, oratorio or cantata literature.

752. Band Literature II. 3 hrs. A survey of band literature, grades V and above.

760. Seminar in History of Church Music. 3 hrs. Sacred choral literature from the Middle Ages to the present is surveyed. Organ literature as it applies to the church service is also examined.

761. Seminar in Music Literature. 3 hrs. A course designed to expand the student's knowledge of music literature through a period, historical, or school approach.

762. Seminar in Music Literature. 3 hrs. A continuation of MUS 761.

786. Concert Band Arranging. 3 hrs. Prerequisite: MUS 401 or permission of instructor. Designed to provide the arranger with essential techniques of scoring for concert band, with special focus on existing concert band music.

787. Arranging for School Choruses. 3 hrs. Designed to focus on selected choral music and to provide the arranger with essential techniques of scoring for school chorus.

791. Research in Music. 1-16 hrs.

792. Special Problems I, II, III. 1-3 hrs. each, arr. Investigation of specialized areas of interest.

797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

821. Advanced Analytical Techniques. 3 hrs. An in-depth analysis of selected works prior to 1750. Prerequisite: MUS 721 or permission of music theory faculty.

822. Advanced Analytical Techniques. 3 hrs. An in-depth analysis of selected works chosen from the Classical and Romantic periods. Prerequisite: MUS 722 or permission of the music theory faculty.

823. Advanced Analytical Techniques. 3 hrs. An in-depth analysis of selected works chosen from the 20th century. Prerequisite: MUS 723 or permission of the music theory faculty.

870. First Doctoral Solo Recital. 3 hrs. Prerequisite: Permission of applied music instructor and approval of the major professor.

871. Doctoral Lecture Recital. 3 hrs. Prerequisite: Permission of applied music instructor and approval of the major professor.

872. Second Doctoral Solo Recital. 1 hr. Prerequisite: Permission of music performance studies instructor and approval of the major professor.

873. Concerto Performance with Band or Orchestra. 1 hr. Prerequisite: Permission of applied music instructor and approval of the major professor. A solo performance of a major work with a major performing ensemble is this **Bulletin's** definition of "concerto."

874. Major Solo Role in an Opera. 1 hr. Permission of applied music instructor and approval of the major professor.

875. Major Solo Role in Oratorio. 1 hr. Prerequisite: Permission of music performance studies instructor and approval of the major professor.

876. Chamber Music Recital. 1 hr. Prerequisite: Permission of music performance studies instructor and approval of the major professor.

898. Dissertation. 12 hrs.

MUSIC EDUCATION (MED-680)

523. Organ Construction and Design. 3 hrs.

524. Instrument Repair. 3 hrs. Designed to give practical experience in preventive maintenance, minor repair and adjustment of string, woodwind, brass and percussion instruments.

529. Piano Tuning and Repair. 3 hrs. Study of basic techniques of tuning and repairing pianos.

538. Band Literature I. 2 hrs. A survey of band literature, grades I through IV.

541. Workshop in Choral Methods and Materials I. 3 hrs. A study of choral pedagogy and literature for grades 6-12. May not apply toward degrees in Music or Music Education.

542. Workshop in Choral Methods and Materials II. 3 hrs. A continuation of MED 541. May not apply toward degrees in Music or Music Education.

543. Workshop in Choral Methods and Materials III. 3 hrs. A continuation of MED 542. May not apply toward degrees in Music or Music Education.

550. Vocal Pedagogy. 2 hrs. Techniques, practices, and materials used in teaching voice; practical experience in teaching voice. Cannot be applied toward a music degree.

555. Arranging for Marching Band. 3 hrs. Designed to provide the arranger with the essential techniques of scoring for the outdoor band. Course will focus on the study of existing arrangements.

590. Piano Workshop. 2 hrs. A course designed to meet the needs of the piano teacher, including a survey of standard materials together with a presentation of modern teaching methods. Cannot be applied toward a music degree.

591. Instrumental Workshop. 2 hrs. May be repeated for a maximum of six hours credit. Cannot be applied toward a music degree.

592. Choral Workshop. 2 hrs. May be repeated for a maximum of six hours credit. Cannot be applied toward a music degree.

593. Elementary Music Workshop. 2 hrs. Intensive examination of current problems, trends, and materials in the field of elementary music education. Cannot be applied toward a music degree.

594. Marching Band Workshop. 1-2 hrs. May be repeated for a maximum of six hours credit. Cannot be applied toward a music degree.

595. Instrumental Conductors Conference. 2 hrs. May be repeated for a maximum of six hours credit. Cannot be applied toward a music degree.

596. Choral Conductors Conference. 2 hrs. May be repeated for a maximum of six hours credit. Cannot be applied toward a music degree.

624. Practicum in Music Education. 3 hrs. Examination of theory and research on teaching music to pre-college and college age students with subsequent application in a real environment.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs. No thesis will be accepted unless accompanied by an abstract. Theses which employ questionnaires will not be accepted unless accompanied by summaries of the findings to be mailed to respondents.

700. Advanced Vocal Pedagogy. 2 hrs. Advanced study of vocal pedagogical procedures.

714. Administration and Supervision of Elementary and Secondary School Music Programs. 3 hrs. The organization, supervision, and evaluation of the total music program, including program development, problems of finance, and selection of personnel and equipment.

725. Foundations and Principles of Music Education. 3 hrs. Historical and philosophical foundations of the total music education program, and principles of teaching, learning, organization, administration.

726. Research in Music Education. 3 hrs. Investigation of current research and literature in music education; study of writing techniques pertinent to music education research.

731. Graduate Conducting I. 3 hrs. Development of conducting skill, rehearsal techniques, study and preparation of scores of standard band, choral, and orchestral repertoire.

732. Graduate Conducting II. 3 hrs. A continuation of MED 731.

733. Seminar in Conducting. 1-3 hrs. Techniques of advanced choral and instrumental conducting. Score analysis and problems of preparation and performance.

734. Woodwind Techniques and Materials. 2 hrs. A course dealing with the problems of teaching woodwind instruments and a comprehensive study of woodwind literature.

735. Brass Techniques and Materials. 2 hrs. A comprehensive survey of teaching techniques for the brasses with a survey of teaching materials emphasizing pedagogy textbooks and books designed for class instruction.

736. Percussion Techniques and Materials. 2 hrs. Performance techniques of all percussion instruments and a survey of teaching materials and literature for percussion.

737. String Techniques and Materials. 2 hrs. A comprehensive survey of teaching techniques for stringed instruments; survey of teaching materials emphasizing pedagogy textbooks and method books.

738. Keyboard Techniques and Materials. 2 hrs. An examination of keyboard literature as it relates to the techniques and practices of piano instruction.

739. Vocal Techniques and Materials. 2 hrs. Techniques and procedures for teaching correct vocal production habits; examination of choral literature for secondary school and collegiate levels.

740. Music Education in the Elementary Schools. 3 hrs. An advanced course in the development of music education programs for children.

750. Music in General Education. 3 hrs. An examination of the role of music in the general education of students throughout the educational system.

755. Aesthetics and Psychology of Music. 3 hrs. An examination of issues and theoretical positions in the areas of philosophy of music and of musical learning.

756. Evaluation and Guidance in Music Education. 3 hrs. The administration and interpretation of tests of musical talent and musical achievement.

791. Research in Music Education. 1-16 hrs. Prerequisite: Approval of the major professor.

797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

798. Specialist Thesis. 3 hrs.

825. Doctoral Seminar in Music Education. 3 hrs. Orientation to doctoral study. Studies in the history and philosophy of music education.

826. Doctoral Seminar in Music Education. 3 hrs. Primary focus on advanced research methods, techniques, and procedures appropriate to the doctoral level of music education.

828. **Administration of College and University Music Programs.** 3 hrs. A practical course in the principles of administration, organization, and goals of music programs at the college or university level.

898. **Dissertation.** 12 hrs.

MUSIC PERFORMANCE STUDIES (MUP-670)

601, 602, + 603. **Piano.** 1-4 hrs.

604, 605, + 606. **Harpsichord.** 1-4 hrs.

611, 612, + 613. **Organ.** 1-4 hrs.

614, 615, + 616. **Flute.** 1-4 hrs.

617, 618, + 619. **Oboe.** 1-4 hrs.

620, 621, + 622. **Clarinet.** 1-4 hrs.

623, 624, + 625. **Saxophone.** 1-4 hrs.

626, 627, + 628. **Bassoon.** 1-4 hrs.

629, 630, + 631. **Horn.** 1-4 hrs.

632, 633, + 634. **Trumpet.** 1-4 hrs.

635, 636, + 637. **Trombone.** 1-4 hrs.

638, 639, + 640. **Euphonium.** 1-4 hrs.

641, 642, + 643. **Tuba.** 1-4 hrs.

644, 645, + 646. **Violin.** 1-4 hrs.

647, 648, + 649. **Viola.** 1-4 hrs.

650, 651, + 652. **Cello.** 1-4 hrs.

653, 654, + 655. **String Bass.** 1-4 hrs.

656, 657, + 658. **Percussion.** 1-4 hrs.

661, 662, + 663. **Voice.** 1-4 hrs.

664, 665, + 666. **Harp.** 1-4 hrs.

667, 668, + 669. **Guitar.** 1-4 hrs.

671, 672, 673. **Chamber Music.** 1 hr.

678. **Carillon.** 1 hr. Participation by audition only.

679. **Covenant.** 1 hr. Participation by audition only.

681. **Orchestra.** 1 hr. May be taken three times.

682. **Band.** 1 hr. May be taken three times.

683. **University Chorale.** 1 hr. May be taken three times.

684. **Jazz Lab. Band.** 1 hr.

685. **Collegium Musicum.** 1 hr. May be taken two times.

686. **Oratorio Chorus.** 1 hr. May be taken three times.

687. **Jazz Singers.** 1 hr. By audition only.

688. **University Singers.** 1 hr. May be taken three times.

689. **Chamber Singers.** 1 hr. May be taken three times.

690. **Opera Theatre.** 1 hr. May be taken two times.

691, 692, 693, 694, + 695. **Advanced Composition.** 1-3 hrs.

701, 702. **Piano.** 1-4 hrs.

704, 705. **Harpsichord.** 1-4 hrs.

711, 712. **Organ.** 1-4 hrs.

714, 715. **Flute.** 1-4 hrs.

717, 718. **Oboe.** 1-4 hrs.

- 720, 721. **Clarinet.** 1-4 hrs.
 723, 724. **Saxophone.** 1-4 hrs.
 726, 727. **Bassoon.** 1-4 hrs.
 729, 730. **Horn.** 1-4 hrs.
 732, 733. **Trumpet.** 1-4 hrs.
 735, 736. **Trombone.** 1-4 hrs.
 738, 739. **Euphonium.** 1-4 hrs.
 741, 742. **Tuba.** 1-4 hrs.
 744, 745. **Violin.** 1-4 hrs.
 747, 748. **Viola.** 1-4 hrs.
 750, 751. **Cello.** 1-4 hrs.
 753, 754. **String Bass.** 1-4 hrs.
 756, 757. **Percussion.** 1-4 hrs.
 761, 762. **Voice.** 1-4 hrs.
 764, 765. **Harp.** 1-4 hrs.
 767, 768. **Guitar.** 1-4 hrs.
 771, 772, 773. **Chamber Music.** 1 hr.
 781. **Orchestra.** 1 hr. May be taken three times.
 782. **Band.** 1 hr. May be taken three times.
 783. **University Chorale.** 1 hr. May be taken three times.
 784. **Jazz Lab. Band.** 1 hr.
 785. **Collegium Musicum.** 1 hr. May be taken two times.
 786. **Oratorio Chorus.** 1 hr. May be taken three times.
 788. **University Singers.** 1 hr. May be taken three times.
 789. **Chamber Singers.** 1 hr. May be taken three times.
 790. **Opera Theatre.** 1 hr. May be taken two times.
 791, 792, 793. **Composition.** 1-3 hrs.
 801, 802. **Piano.** 1-4 hrs.
 804, 805. **Harpsichord.** 1-4 hrs.
 811, 812. **Organ.** 1-4 hrs.
 814, 815. **Flute.** 1-4 hrs.
 817, 818. **Oboe.** 1-4 hrs.
 820, 821. **Clarinet.** 1-4 hrs.
 823, 824. **Saxophone.** 1-4 hrs.
 826, 827. **Bassoon.** 1-4 hrs.
 829, 830. **Horn.** 1-4 hrs.
 832, 833. **Trumpet.** 1-4 hrs.
 835, 836. **Trombone.** 1-4 hrs.
 838, 839. **Euphonium.** 1-4 hrs.
 841, 842. **Tuba.** 1-4 hrs.
 844, 845. **Violin.** 1-4 hrs.
 847, 848. **Viola.** 1-4 hrs.
 850, 851. **Cello.** 1-4 hrs.
 853, 854. **String Bass.** 1-4 hrs.
 856, 857. **Percussion.** 1-4 hrs.

- 861, 862. **Voice.** 1-4 hrs.
- 864, 865. **Harp.** 1-4 hrs.
- 871, 872, 873. **Chamber Music.** 1 hr.
- 881. **Orchestra.** 1 hr. May be taken three times.
- 882. **Band.** 1 hr. May be taken three times.
- 883. **University Chorale.** 1 hr. May be taken three times.
- 884. **Jazz Lab Band.** 1 hr.
- 885. **Collegium Musicum.** 1 hr. May be taken two times.
- 886. **Oratorio Chorus.** 1 hr. May be taken three times.
- 888. **University Singers.** 1 hr. May be taken three times.
- 888. **University Singers.** 1 hr. May be taken three times.
- 889. **Chamber Singers.** 1 hr. May be taken three times.
- 890. **Opera Theatre.** 1 hr. May be taken two times.
- 891, 892, 893. **Composition.** 1-3 hrs.

NURSING (NSG-075)

519. **The Computer as a Nursing Tool.** 3 hrs. Exposure to the computer and examination of nursing applications.

536. **Hospice: Concept and Application.** 3 hrs. Explores concept and operationalization with emphasis on legislation, funding, referrals, advocacy.

537. **Abusive Behavior: An Exploration.** An inter-disciplinary exploration of abusive behavior across the life span.

538. **Health Care Financing in the 1980's.** 3 hrs. Survey of health economics, finance theory, cost control, prospective reimbursement, and trends.

591. **Austrian Studies: Variable Topics.** 3 hrs.

593. **Health Care of the Elderly in England.** 3 hrs. Resources for the elderly in U.S. and Great Britain. Attitudes and perceptions of elderly by British health care providers.

594. **Health Care in England.** 3 hrs. Comparison of health care system in United States and England. Philosophies of health and nursing in a community are explored.

595. **Management and Economics of Health Care.** 3 or 6 hrs. United States and British health system, financing, administration, and nursing management.

596. **Nursing: The British Heritage.** 3 or 6 hrs. Evolution of modern nursing in England within the context of international, social, economic, and political events.

597. **Emergency Nursing: A British View.** 3 or 6 hrs. Introduction to the British health system and roles assumed by British emergency nurses.

598. **Families of the Developmentally Disabled.** 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

599. **British Studies: Hospice.** 3 hrs. Introduction to hospice concept and symptom control in special units, hospitals, and homes in the United Kingdom.

600. **Issues in Nursing and Health Care.** 1 hr. Prerequisite or concurrent: NSG 601. Seminar in contemporary problems and trends in nursing and health care.

601. **Theory Development in Nursing.** 3 hrs. Concepts, models, and theories relevant to nursing practice, education, and research.

603. **Nursing Research.** 3 hrs. Prerequisite: Introductory course in statistics. Prerequisite or concurrent: NSG 601, and first course in major. Elements of the research process leading to the development of a proposal.

606. Death and Bereavement. 3 hrs. An examination of research and theory related to death and bereavement.

607. Planning and Public Policy Formation for Health. 3 hrs. Permission of instructor. An examination of issues in health/social planning and public policy at local, state, and national levels.

611. Curriculum and Teaching in Nursing. 3 hrs. Prerequisite or concurrent: NSG 601. Curriculum development, selection, design, and evaluation of instructional systems for the teaching of nursing.

612. Concepts of Organizational Behavior in Nursing. 3 hrs. Prerequisite or concurrent: NSG 601. Theories and research related to organizational behavior in the administration of nursing services.

613. Clinical Specialist in Nursing. 3 hrs. Prerequisite: NSG 621 or 631. Seminar focused on theory and research pertaining to the clinical major for practice of clinical nurse specialists.

614-L. Practice of Clinical Nurse Specialization. 4 hrs. Prerequisite: NSG 613 and permission of instructor. Seminar and advanced practicum in area of nursing specialization as identified by clinical major.

618. The Role of Nurse Administrator. 2 hrs. Prerequisites: NSG 603, 612. Concurrent: NSG 618-L. Seminar. Analysis of the role of the nurse administrator related to the department of nursing.

618-L. Role Practicum. 2 hrs. Concurrent: NSG 618. Application of role theory related to a department of nursing.

619. Fiscal Management for Nurses. 3 hrs. Fiscal responsibility, utilization of financial management principles, techniques and cost control measures in nursing administration.

621. Concepts and Theories for Community Health Nursing. 3 hrs. Prerequisites or concurrent: NSG 601 or permission of instructor. An analysis of concepts, theories, and research relevant to community health nursing.

622. Seminar in Community Health Nursing. 2 hrs. Prerequisite: NSG 621; Concurrent: NSG 622L. Assessment of communities and design of programs of community health nursing for specific populations. The epidemiological and health planning processes are included.

622-L. Community Health Nursing Practicum. 2-3 hrs. Concurrent NSG 622. Prerequisite: NSG 621. As minor: 2 hrs. Prerequisite: role cognate. As Major: 3 hrs. Prerequisite: role cognate. Implementation and evaluation of community health nursing programs for specific populations.

623. U.S. and World Community Health Nursing Issues. 3 hrs. Prerequisites: NSG 622; NSG 603. Concurrent NSG 623L. Analysis of organizations and resources affecting health care and policy setting relevant to the practice of community health nursing.

623-L. U.S. and World Community Health Nursing Practicum. 2 hrs. Concurrent: NSG 623. Synthesis and application of theories, and research, affecting health care, health planning, and policy setting.

631. Theories for Psychiatric Mental Health Nursing. 3 hrs. Prerequisite or concurrent: NSG 601. Analysis of theories and research relevant to mental health nursing.

631-L. Theories Practicum. 1 hr. Concurrent: NSG 631. Practicum in theory-based assessment for psychiatric mental health nursing. Required for majors only.

632. Psychiatric Nursing with Groups. 2 hrs. Prerequisite: NSG 631. Concurrent: NSG 632L. Theoretical design and evaluation of psychiatric nursing systems in the assessment and treatment of individuals in the group setting.

632-L. Psychiatric Nursing Practicum. 2-5 hrs. Concurrent: NSG 632. Design, implementation, and evaluation of nursing systems for individuals, families, and groups. May be repeated to a total of five hours.

633. Psychiatric Nursing of Families. 2 hrs. Prerequisite: NSG 603. Concurrent: NSG 632L. Theory based design and evaluation of nursing interventions in marriage/family dysfunction.

660. Marriage and Family Studies. 3 hrs. Prerequisite: Permission of instructor. Analysis and conceptualization of family structure and process utilizing systems theory and related research findings.

678. Seminar in Teaching. 2 hrs. Prerequisite: NSG 611; prerequisite or concurrent: role elective. Role, change, and conflict theory; evaluation; legal aspects; university governance; student/faculty relations.

678-L. Teaching Practicum. 2 hrs. Concurrent: NSG 678. Application of theories in classroom/clinical teaching; evaluation process; and faculty role in schools of nursing.

679-L. Nursing Administration Practicum. 3 hrs. Required for majors. Prerequisites: NSG 618, 619. Clinical applications relative to the role of the nurse administrator with multi-disciplinary interaction.

681. Children at Risk. 3 hrs. Topics related to biological and environmental contributions to development, factors deterring normal development; legal and ethical issues.

682. Assessment of Handicapped Children 0-5. 3 hrs. Training in methods of assessing cognitive, motor, language, neurological, and behavioral aspects of development.

683. Intervention Procedures for Handicapped Children 0-5. 3 hrs. Programming techniques and strategies for language, cognitive, social, self-help, and motor development.

691. Research. 1-3 hrs. Prerequisite: Graduate research course and approval of instructor. Student selects an area of interest in nursing for study. May repeat.

692. Special Problems. 1-3 hrs. Prerequisite: Approval of instructor. Student selects an area of interest in nursing for study. May repeat.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of six hours. Prerequisites: NSG 603, 612, or 621 or 631. Credit deferred until thesis completed.

PHILOSOPHY (PHI-284)

506. Philosophy of Man. 3 hrs. Philosophical consideration of the nature of man including topics in philosophical anthropology and philosophy of mind.

536. Aesthetics. 3 hrs. Philosophical analysis of theories of art and beauty.

540. American Philosophy. 3 hrs. Survey of the development of philosophy in America and major American philosophers.

550. Existentialism and Phenomenology. 3 hrs. An examination of the central themes in contemporary European existentialism and phenomenology.

551. Political Philosophy. 3 hrs. The major schools of political philosophy from classical to contemporary times.

552. Philosophy of Health Care. 3 hrs. An examination of various conceptual and ethical issues in the health care professions.

553. **Philosophy of Law.** 3 hrs. An inquiry into theories of law.
556. **The Philosophy of Science.** 3 hrs. The conditions and status of knowledge, perception, measurement, hypothesis and causality.
558. **Symbolic Logic.** 3 hrs. The basic theory and operations of the sentential calculus, quantification, and the logic of relations.
560. **Analytic Philosophy.** 3 hrs. An examination of the central themes in contemporary British-American analytic philosophy.
582. **General Value Inquiry.** 3 hrs. Emphasizes activities and theory in 3 major areas: values clarification; moral development; and ethical reasoning.
599. **British Studies: Philosophy.** 3-6 hrs. An introduction to the language and techniques of philosophy relevant to practical critical problems.
610. **Philosophy of Religion.** 3 hrs. Seminar topics in philosophical theology.
620. **Seminar in Metaphysics.** 3 hrs. Classical and contemporary metaphysics will be examined. Modern criticism by logicians, analytic philosophers, and philosophers of science will be presented.
624. **Seminar in Classical Philosophy.** 3 hrs. A critical investigation of the writings of selected classical philosophers.
625. **Seminar in Modern Philosophy.** 3 hrs. A critical investigation of the writings of selected modern and contemporary philosophers.
630. **Seminar in Epistemology.** 3 hrs. Advanced study of issues concerning the theory of knowledge.
635. **Ethics.** 3 hrs. An advanced study of issues and problems in moral philosophy.
636. **Major Philosopher.** 3 hrs. An advanced study of the contributions of a selected philosopher.
640. **Major Issues in Philosophy.** 3-6 hrs. This course focuses on one or more major issues in philosophy in one or more historical periods of philosophy. The student may repeat this course one time if the course involves a different major issue.
681. **Departmental Seminar.** 1 hr. Repeatable up to a total of three semester credit hours.
691. **Research in Philosophy.** 1-16 hrs. With the approval of the department and under the guidance of the student's major professor, the student will begin research on his/her master's thesis.
692. **Special Problems.** 1-6 hrs. A problem study to be approved by the department chairman.
697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.
698. **Thesis.** 1-6 hrs. for a total of 6 hrs.

PHYSICAL EDUCATION (PED-730)

501. **Corrective, Adaptive, and Developmental Physical Education.** 3 hrs. Recognition of and corrective exercises for functional abnormalities.
504. **Motor Development.** 3 hrs. A study of the motor aspects of human growth and development processes.
510. **Physical Education and Recreation for the Educationally Disabled and Other Behavioral Disorders.** 3 hrs. The development of concepts and knowledge of physical education programs for LD, MR, ED and other disorders.

511. Physical Education and Recreation for the Crippled and Orthopedically Disabled. 3 hrs. The development of concepts and knowledge for the development of physical education programs for CP, PH, respiratory and other health impaired individuals.

512. Sports Programs for the Disabled. 3 hrs. To acquaint the student with competitive programs and special techniques used in preparing the disabled for participation in competitive sports programs.

515. Motor Development Project. 3 hrs.

524. Seminar in Elementary School Physical Education. 3 hrs. Comprehensive readings and discussions of all aspects of elementary school physical education.

551. Techniques of Teaching Stunts, Tumbling, and Use of Apparatus. 3 hrs.

590. Physical Education and Recreation for the Handicapped. 1-3 hrs.

597. Interdisciplinary Seminar in Development Disabilities. 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.

599. British Studies. 3-6 hrs. Involves variable topics. Lectures and supervised research in England. Offered exclusively through the USM Institute of Anglo-American Studies.

601. Physiological Basis of Activity. 3 hrs. The study of the physiological bases of muscular activity with special attention to general effects on body functions.

602. Theory and Practice of Graded Exercise Testing. 3 hrs. Study and application of graded exercise testing safely and productively so as to obtain valid and reliable data.

603. Theory and Practice of Exercise Leadership. 3 hrs. Cognitive and practical learning experience in GXT, interpretation, prescriptions and supervision of exercise programs.

680. Research Techniques. 3 hrs. Discovery and recognition of problems, evaluation of problems and procedures, types and techniques of research.

691. Research I, II, III. 1-16 hrs.

692. Special Problems. 3 hrs.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis completed.

701. Advanced Physiology of Exercise. 3 hrs. Circulatory, respiratory, nervous, and muscular system during and after physical activity.

702. Physiology of Exercise Laboratory. 2 hrs. Use and care of physiology laboratory equipment.

703. Advanced Kinesiology. 3 hrs. The application of anatomical and physiological principles of kinesiology to physical activity.

704. Tests and Measurements in Physical Education. 3 hrs. Tests of fitness, skills, and abilities. Administration and interpretation.

705. Motor Learning. 3 hrs. Physical and psychological variables essential to motor learning.

706. Cardiovascular Physiology. 3 hrs. Physiology of the heart with emphasis on normal versus abnormal conditions effecting human performance.

707. Physiological Response of Women to Physical Training. 3 hrs. Study of women's physiological abilities, susceptibility to injuries, gynecological problems and psychological aspects of coping with physical training.

709. Age Characteristics of Motor Skills. 3 hrs. Analysis of activities and relationships to motor development.

716. Perceptual-Motor Problems; Diagnosis and Remediation. 3 hrs. Emphasis on perceptual-motor test selection, administration and implications.

720. Problems of Administration in Physical Education. 3 hrs. Staff, finance, facilities, programs, and other problems faced by administrators.

722. Organization and Administration of Intramural and Extramural Activities. 3 hrs.

723. Principles of Teaching Physical Education. 3 hrs. Developing concepts in teaching methods employing physiological and kinesiological principles.

730. Fundamentals of Cardiac Rehabilitation. 3 hrs. Attention is given to components of myocardial infarction and cardiac rehabilitation programs.

742. Problems of Curriculum in Physical Education. 3 hrs. Fundamental principles and bases of curriculum construction.

744. Foundations and Trends in Health and Physical Education. 3 hrs.

745. Effective Teaching and Supervision in Physical Education. 3 hrs. The improvement of individual teaching and supervision as a result of analyzing teaching behavior.

750. Facilities and Equipment in Physical Education. 3 hrs. Planning for indoor, outdoor, and special facilities in physical education.

780. Graduate Seminar. 1 hr. May be repeated twice for a total of 3 hrs.

791. Research. 1-16 hrs.

792. Special Problems. 3 hrs.

796. Practicum in Physical Education. 2-6 hrs.

797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

801, 802, 803. Physiological Effects of Motor Activity. 3-9 hrs.

804. Principles of Design and Construction of Test in Physical Education. 3 hrs.

805. Advanced Exercise Physiology II. 3 hrs. Prerequisite: PED 701. Emphasis on systems of energy delivery and utilization, enhancement of energy capacity and work performance.

805-L. Advanced Exercise Physiology II Laboratory. 2 hrs. Application of advanced laboratory in techniques in the study of human performance.

807. Functional Evaluation and Exercise Testing. 3 hrs. Emphasis will be placed on functional anatomy, exercise, physiology, pathophysiology and electrocardiography.

821. Management of HPER Programs. 3 hrs. The analysis of leadership and supervision for effective management of HPER programs.

830. Cardiac Rehabilitation. 3 hrs. Attention is given to components of myocardial infarction and cardiac rehabilitation programs.

831. Gross Anatomy. 3 hrs. Prerequisite: PED 703. Special attention is given to osteology, myology, and neurology, with hands-on dissection experience acquired from a variety of cadaveric and primate specimens.

832-L. Gross Anatomy Laboratory. 2 hrs. Prerequisite: PED 703. Designed to teach dissection techniques and to dissect cadaveric and Rhesus monkey specimens.

833. Nutrition and Human Performance. 3 hrs. The study of diets and dietary ingredients thought to increase physical capacity with special attention paid to ongoing research in nutrition and athletic performance.

834. Biomechanical Analysis of Sports Skills. 3 hrs. Prerequisite: PED 703. The study of the mechanical foundations of human motion.

840. Readings in Physical Education. 3 hrs. Extensive reading and discussion of physical education literature.

845. Research on Teaching Physical Education. 3 hrs. Prerequisite: PED 745. The analysis, synthesis, and evaluation of past and present research concerning teacher behavior.

898. Dissertation. 12 hrs. Credit deferred until dissertation completed.

PHYSICS (PHY-360)

510. Physical Oceanography I. 3 hrs. Prerequisites: PHY 112 or 202 and MAT 179. An introduction to the properties of sea water, fluid mechanics, and energy exchange.

546. Acoustics. 3 hrs. Prerequisites: MAT 417 and permission of instructor. The generation, transmission, reflection, and absorption of sound in solids, liquids, and gases are presented.

551. Physical Applications of the Fourier Transform. 3 hrs. Prerequisites: PHY 202 and MAT 280. The continuous Fourier transform and its symmetries together with its roles concerning measuring devices.

555. Fluid Dynamics. 3 hrs. Prerequisites: PHY 350, MAT 385. A mathematical development of the physical principles governing fluid flow.

564. Fundamentals of Solid State Physics. 3 hrs. Prerequisite: Permission. The basic physical processes which occur in solids and semiconductors.

565. Nuclear Physics. 3 hrs. Prerequisite: PHY 361. Nuclear binding forces, chain reaction, and the non-steady state reactor, radiation detection.

571. Physical Marine Science. 3 hrs. Prerequisites: PHY 112 or 202 and MAT 179. A core requirement in the marine science program. Covers the major physical properties and processes of marine waters.

+ 571-L. Physical Marine Science Laboratory. 1 hr. Corequisite: PHY 571 or MAR 561. Experiments to support PHY 571 or MAR 561 include sampling, instrument calibrations, wave refraction, reflection and diffraction. A one-day field trip is scheduled.

585. History and Literature of Physics. 3 hrs. A survey of the history of physics from ancient times, stressing the rise and fall of concepts.

601. Mechanics. 3 hrs. Prerequisite: Permission. A formal mathematical development of graduate level mechanics.

602. Electricity and Magnetism. 3 hrs. Prerequisite: Permission. A formal mathematical development of graduate level electricity and magnetism.

603. Statistical Physics. 3 hrs. A review of thermodynamics, equilibrium, ensembles and processes, phase transitions and critical phenomena, computational and approximation methods.

604. Physics for High School Teachers. 3 hrs. Prerequisite: Permission. Principles of physics designed to up-date the teacher's effectiveness in teaching physics.

605. Special Topics in Theoretical or Experimental Physics. 3 hrs. Prerequisite: Permission. Subjects depend upon current interest of students and staff.

606. Methods of Mathematical Physics. 3 hrs. Permission. The application of advanced mathematical methods to the study of various physical systems.

610. Astronomy for Teachers. 3 hrs. Prerequisite: Permission. Solar-system and stellar astronomy.

640. **Electron Optics and Its Applications.** 3 hrs. Prerequisite: Permission. Electrostatic and magnetic lenses, electron microscopes.

650. **Quantum Mechanics I.** 3 hrs. Prerequisite: Permission. The Schroedinger equation, operators and eigenfunctions, spherically symmetric systems.

651. **Quantum Mechanics II.** 3 hrs. Prerequisite: Permission. Scattering theory, matrix mechanics, angular momentum, perturbation theory.

689. **Seminar I.** 1 hr. Prerequisite: Permission. Study of current literature in physics supplemented by laboratory research.

689. **Seminar II.** 1 hr. Prerequisite: Permission. Study of current literature in physics supplemented by laboratory research.

689. **Seminar III.** 1 hr. Prerequisite: Permission. Study of current literature in physics supplemented by laboratory research.

689. **Seminar IV.** 1 hr. Prerequisite: Permission. Study of current literature in physics supplemented by laboratory research.

691. **Research in Physics.** 1-16 hrs.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hours.

PLANNING (PLG-260)

550. **Grantsmanship.** 3 hrs. Identification and analysis of funding programs supporting community and regional development. Exercises in grant writing and management.

561. **Socioeconomic Planning.** 3 hrs. Compilation, analysis, and projection of population and economic variables as they related to community and regional planning.

562. **Environmental Planning.** 3 hrs. A detailed study of environmental planning analysis and methodology as an element in land-use decision-making systems.

563. **Planning Methods.** 3 hrs. An introduction to basic methods and techniques used in planning and policy analysis.

564. **Community Infrastructure.** 3 hrs. Examination and analysis of housing, transportation, and community facilities planning, development, and operations.

565. **Land Use Planning and Policy.** 3 hrs. Consideration of various legal and institutional tools related to implementation of community and regional plans.

566. **Planning Agency Management.** 3 hrs. An analysis of the management and operation procedures of community and regional planning organizations.

569. **Studio Laboratory: Plan Preparation.** 3 hrs. Preparation and presentation of a professional plan as a collaborative student/community effort. May be repeated with change of content for a total of six (6) hours.

570. **Planning Theory and Practice.** 3 hrs. A study of the development of planning theory and practice and the contributions various professions and academic disciplines have made to the planning profession.

599. **Comparative Urban Planning.** 3-6 hrs. This course focuses on urban planning and the development of the urban landscape in the British Isles. Includes lectures, field trips and directed research.

662. **Seminar in Environmental Planning.** 3 hrs. Prerequisite: PLG 462/562 or approval of instructor.

665. **Seminar in Community and Regional Planning.** 3 hrs. An overview of the development and fundamentals of community and regional planning.

666. **Research Techniques and Presentation of Planning Data.** 3 hrs. Development of professional skills in the areas of planning data collection, analysis, and presentation.

667. **Development Dispute Resolution.** 3 hrs. Examines contemporary methods used to resolve urban development disputes.

668. **The Context of Public Planning.** 3 hrs. An examination of the political, social, economic and organizational context of public planning.

669. **Site Planning and Development.** 3 hrs. A study of design, financing, permitting and scheduling of large scale developments.

691. **Internship.** 1-9 hrs. May be repeated for a total of nine hours.

692. **Special Problems.** 1-6 hrs.

697. **Independent Study and Research.** Arr. Not to be counted as credit toward a degree. Students who are not in residence but are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 1-6 hrs. for a total of 6 hours.

POLITICAL SCIENCE (PS-280)

501. **Political Socialization.** 3 hrs. An analysis of the American political system on an advanced level.

502. **Urban Politics.** 3 hrs.

504. **The Legislative Process.** 3 hrs.

506. **Political Parties.** 3 hrs.

507. **Mississippi Government.** 3 hrs.

508. **The American Presidency.** 3 hrs. An analysis of the selection, role, power, and performance of the presidency.

509. **Southern Politics.** 3 hrs. An examination of the politics and political culture of the southern states.

520. **Political Theory to Locke.** 3 hrs.

521. **Political Theory Locke to Present.** 3 hrs.

525. **American Political Theory.** 3 hrs.

531. **International Law and Organization.** 3 hrs.

532. **Foreign Policies of the Major Powers.** 3 hrs.

535. **Comparative Foreign Policy.** 3 hrs.

550. **Comparative Studies in European Politics.** 3 hrs.

551. **Soviet Government and Politics.** 3 hrs.

552. **The Political Systems of Great Britain and the Commonwealth.** 3 hrs.

556. **Latin American Governments and Politics.** 3 hrs.

557. **Political Development.** 3 hrs. A comparative analysis of political change and modernization.

558. **Latin American Political and Economic Development.** 3 hrs.

559. **Federalism.** 3 hrs. An analysis of the theory and practice of political systems which are organized along federal lines.

571. **Public Personnel Administration.** 3 hrs.

572. **Organization and Management.** 3 hrs.

573. **Public Policy.** 3 hrs.

574. **Government Budgetary Process.** 3 hrs. Facets of budgetary administration, emphasizing federal and municipal budgets, theory and process.

580. **United States Constitutional Law.** 3 hrs.

581. **The American Judicial Process.** 3 hrs.

582. **Comparative Judicial Politics.** 3 hrs. Prerequisite: PS 580 or PS 581 or consent of instructor.

584. **Administrative Law.** 3 hrs. An introduction to the field of administrative law including the analysis of substantive law which administrative agencies produce as well as the body of requirements that control administrative activities and processes.

585. **International Law.** 3 hrs.

588. **Jurisprudence.** 3 hrs.

589. **U.S. Supreme Court and Civil Liberties.** 3 hrs. An analysis of the role of the U.S. Supreme Court in protecting individual rights. Primary focus is on litigation involving provisions of the Bill of Rights.

599. **Seminar in British Politics.** 3-6 hrs. A seminar conducted in Great Britain under the auspices of the Anglo-American Institute.

691. **Research in Political Science.** 1-16 hrs.

692. **Special Problems.** 1-3 hrs. arr. The student works individually on a paper in political science under the supervision of a graduate faculty member.

693. **Internship in Political Science.** Hrs. arr. Departmental approval required. Student will work with an employer acting in the public sector in order to form practical experience in political and public affairs.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs.

700. **Seminar in U.S. Government.** 3 hrs. May be taken twice for credit. Prerequisite: Course in American national, state, and local government or consent of instructor.

710. **Readings Seminar in Political Science.** 3 hrs. A study of political science literature emphasizing interpretation and criticism.

720. **Scope and Methods.** 3 hrs. A survey of the scope of political science and of the tools and methods utilized in the discipline.

721. **Seminar in Political Theory.** 3 hrs. May be taken twice for credit.

730. **Seminar in U.S. Foreign Relations.** 3 hrs. May be taken twice for credit. Prerequisite: Another course in U.S. foreign policy or history of U.S. foreign policy or permission of instructor. A survey of current United State foreign policies and problems.

731. **Seminar in International Relations.** 3 hrs. May be taken twice for credit. An intensive survey and analysis of the methodology, literature, and substance of the process of trans-state politics.

750. **Seminar in Comparative Government and Politics.** 3 hrs. May be taken twice for credit. Prerequisite: One or more courses in comparative government or permission of the instructor. A research-type course in which each student will make an intensive study of the political institutions of one country, or of a group of countries having similar governments.

770. **Seminar in Public Administration.** 3 hrs. May be taken twice for credit.

781. **Seminar in Public Law.** 3 hrs. May be taken twice for credit. Prerequisite: A course in constitutional law or consent of the instructor. A research course in which the students examine in depth various aspects of the judicial system and its relationship to other elements in the political process.

791. **Research in Political Science.** 1-16 hrs. Prerequisite: Approval of the major professor.

792. **Special Problems.** 1-3 hrs.

797. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

799. **British Studies: Advanced Seminar in British Politics.** 3-6 hrs. Lecture Series and research in British politics offered abroad under the auspices of the Institute of Anglo-American studies.

898. **Dissertation.** 12 hrs.

POLYMER SCIENCE (PSC-370)

(Please see FORENSIC SCIENCE-FSC-375)

512. **Introduction to Macromolecules.** 3 hrs. An introduction to the chemistry and physics of natural and synthetic high polymers.

570. **Surface Coatings.** 4 hrs. Study of the physical and chemical properties of the pigments, binders, solvents, and additives employed in surface coatings formulations, paint formulation, dispersion techniques, surface preparation, paint testing, non-polluting application techniques, and surface coatings formulations analysis.

+ 570-L. **Laboratory for PSC 570.** 1 hr.

580. **Polymer Kinetics and Reactor Design.** 3 hrs. Introduction to polymerization kinetics and reactor design.

691. **Research in Polymer Science.** 1-16 hrs.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs.

701. **Organic Polymer Chemistry I.** 3 hrs. Reaction mechanisms, polymer concepts, step-growth polymerization, and polymer reactivity.

702. **Organic Polymer Chemistry II.** 3 hrs. Kinetics, free radical reaction mechanisms, homogeneous chain growth polymerization of vinyl compounds, copolymerization, and degradation of polymers.

703. **Organic Polymer Chemistry III.** 3 hrs. Methods of studying stereochemistry of polymers, anionic and cationic polymerization, and polymerization via homo- and heterogeneous catalysis.

710. **Polymer Physical Chemistry I.** 3 hrs. A study of polymer chain conformation, solution thermodynamics, phase equilibria, and transport phenomena.

711. **Polymer Physical Chemistry II.** 3 hrs. Polymer characterization to include light scattering, end group analysis, osmometry, fractionation, viscometry, gel permeation chromatography, and molecular weight distributions.

712. **Polymer Physical Chemistry III. Solid State.** 3 hrs. Morphology, crystallization, entropylasticity, viscoelasticity, glass transition, interfaces of polymers.

+ 720, 721. **Polymer Techniques I, II.** 2 hrs., 2 hrs. Laboratory methods of polymer synthesis, structural determination, and characterization.

730. **Polymer Rheology.** 2 hrs. The elastic and viscosity properties of polymer solutions and melts will be studied from a molecular and engineering perspective.

740. **Polymer Kinetics.** 2 hrs. Introduction to polymerization kinetics.

780, 781. **Selected Topics.** 3 hrs., 3 hrs. To include a survey of such topics as thermally stable polymers, silicone elastomers, emulsion polymers, controlled biocide release from polymers and water-soluble high molecular weight polymers.

789. **Polymer Science Seminar.** 1-4 hrs.

791. **Research.** Hrs. arr. 1-16 hrs.

797. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

801. **Structure and Elasticity of Polymer Networks.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Study of the structure, elasticity and mechanical properties of polymer networks.

802. **Polymer Melt and Solution Rheology.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Study of the Newtonian and non-Newtonian flow behavior of polymer melts and solutions.

803. **Block and Graft Copolymers.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Study of structure, synthetic methods and properties of block, random and graft copolymers.

804. **Naturally Occurring Polymers.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Study of the structure-property relationships of naturally occurring polymers, including polysaccharides, proteins, and nucleic acids.

805. **Surface Coatings.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Scientific principles underlying surface coatings science are studied in depth.

806. **Industrial Monomer and Polymer Science.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Industrial monomer and polymer science.

807. **Testing of Polymers.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Testing of polymers: adhesives, coatings, fibers, plastics, and elastomers.

808. **Polymer Processing Principles.** 2 hrs. Prerequisites: PSC 703 and 712, or permission of instructor. Quantitative descriptions of extrusion, injection molding, rotational molding.

809. **Morphology of Oriented Polymers.** 2 hrs. Prerequisites: PSC 710, 712. Advanced polymer morphology.

810. **Physical Properties of Macromolecular Solids.** 2 hrs. Prerequisites: PSC 710 and 711, or permission of instructor. Advanced study of glassy and crystalline physical state of macromolecular solids emphasizing the influence of morphological structure.

811. **Polymer Physics.** 3 hrs. Prerequisites: PSC 710 and 711 or permission. Advanced study of polymer conformation, phenomenological and molecular theories of polymer relaxation, diffusion in polymers.

812. **Conformational Analysis, Molecular Design of Polymers.** 2 hrs. Prerequisites: PSC 710, 711, 712. Study of molecular interactions that control polymer conformation. Molecular modeling in material design.

898. **Dissertation.** 12 hrs.

PSYCHOLOGY (PSY-175)

518. **History and Systems of Psychology.** 3 hrs. Prerequisite: Permission of the instructor. Review of the history of psychology and intensive study of current systems of psychology.

520. **Sensation and Perception.** 3 hrs. Prerequisite: PSY 320. A survey of sensory and perceptual processes with emphasis on the visual system.

522. **Psychology of Learning.** 3 hrs. Prerequisite: PSY 320. Basic problems, theories, and research in the areas of human and animal learning.

524. **Animal Behavior.** 3 hrs. Prerequisite: PSY 320. The study of animal behavior with special emphasis on the comparison of psychological processes along the phylogenetic scale.

526. **Physiological Psychology.** 3 hrs. Prerequisite: PSY 110. Relationship between physiological functions and behavior.

536. **Abnormal Psychology.** 3 hrs. Prerequisite: Permission of the instructor: Study of the major psychoses, and psychoneuroses, and mental deficiency.

550. **Social Psychology.** 3 hrs. Prerequisite: PSY 110. Study of the individual in group situations, and the influence of the social environment on his behavior and development.

551. **Industrial Psychology.** 3 hrs. Prerequisite: PSY 110. Applications of psychological principles and methods to problems of industry.

555. **Psychology of Personality.** 3 hrs. A study of the factors involved in the development of the mature personality.

556. **Psychology of Aging and Death.** 3 hrs. Study of problems and attitudes concerning aging and death.

557. **Psychology of Religion.** 3 hrs. Prerequisite: PSY 110. An examination of modern psychological perspectives on religious beliefs, experiences, and practices.

562. **Psychological Measurement.** 3 hrs. Prerequisite: PSY 110 and 360 or equivalent. Theory, problems, and techniques of psychological measurement.

582. **Moral Value Development in Childhood and Adolescence.** 3 hrs. A study of the major theories of moral development and techniques for facilitating moral growth.

596. **Families of the Developmentally Disabled.** 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

597. **Interdisciplinary Seminar in Developmental Disabilities.** 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.

599. **British Studies.** 3-6 hrs.

610. **Professional Ethics, Standards, and Issues in Psychology I, II.** 1 hr. each. Prerequisite: Permission of instructor. Professional ethics, standards, and issues in psychology with special emphasis on standards of the American Psychological Association.

612. **Contemporary Topics in Psychology.** 3 hrs. May be repeated up to 12 hrs.

615. **Professional Seminar in Industrial/Organizational Psychology I, II, III, IV.** 1 hr. each. Limit of 6 hrs. Prerequisite: Admission to the I/O program or permission of instructor. An examination of current topics in the professional practice of industrial/organizational psychology.

616. **Proseminar in Clinical Psychology.** 1 hr. Prerequisite: Admission to the clinical training program. An overview of contemporary clinical psychology and an introduction to the scientist/practitioner model at USM.

621. **Theories of Learning.** 3 hrs. Basic concepts, problems, and research methodology in the studying of learning and motivation.

624. **Physiological Psychology.** 3 hrs. Study of neurophysiological mechanisms in behavior and related problems.

635. **Personality.** 3 hrs. Consideration of the major theories of personality, and research on the development and measurement of personality.

640. **Clinical Assessment I.** 3 hrs. Prerequisites: Admission to the clinical psychology training program and permission of instructor. Theory, administration, and interpretation logic of clinical assessment (intellectual, behavioral, social) from infancy to early childhood.

641. **Clinical Assessment II.** 3 hrs. Prerequisites: PSY 640 and permission of instructor. Clinical assessment techniques (psychometric and behavioral) from childhood through adulthood. Experience includes clinical assessments.

642. **Psychoeducational Assessment I, II, III.** 3 hrs. each. Prerequisite: Admission to the school psychology training program or permission of instructor. Theory and practice of psychoeducational assessment; multicultural issues.

643. **Interpretation of Psychological Tests for Exceptional Children.** 3 hrs. Prerequisite: Permission of instructor. A study of the various psychological tests used in the appraisal and evaluation of exceptional children.

660. **Advanced Data Analysis.** 3 hrs. Critical evaluation of a variety of analytic techniques.

661. **Research Evaluation in the Behavioral Sciences.** 3 hrs. Seeks to develop skill in evaluating the methodological soundness and usefulness of behavioral science research.

662. **Correlational Methods.** 3 hrs. Prerequisite: PSY 360 or permission of instructor. Theory and application of probability, Chi Square, simple and multiple correlation and regression, reliability, validity, and cross validation.

663. **Analysis of Variance.** 3 hrs. Prerequisite: PSY 660 or permission of instructor. Concepts of measurement, sampling, variability, hypothesis testing, and power as applied to one way analysis of variance and covariance, including repeated measures.

670. **Advanced Educational Psychology.** 3 hrs. Theory and data bases relating to the contributions of psychology to the schooling process.

671. **Seminar in School Psychology.** 3 hrs. May be repeated to limit of 6 hrs. Prerequisite: Admission to the school psychology training program or permission of instructor. Professional issues and standards; pre-practicum training and experience.

672. **Social Processes in Classroom Learning.** 3 hrs. Pupil-teacher interaction; instruction in developing goals, changing attitudes, resolving conflicts, and enhancing the individual's sense of worth.

674. **Advanced Child Psychology.** 3 hrs. Mental, motor, social, and emotional development of children of elementary school age.

675. **Advanced Adolescent Psychology.** 3 hrs. Advanced study of the adolescent and his or her needs in the home, school, and community.

676. **Psychology of Mental Retardation.** 3 hrs. Prerequisite: Permission of instructor. Study of personality development, problems of adjustment, and abnormal behavior of the mentally retarded.

679. **Advanced Developmental Psychology.** 3 hrs. Principles of psychological development across the life span.

687. **Individual Psychological Testing: Stanford-Binet.** 3 hrs. Prerequisite: Permission of the instructor. Supervised study of the use, administration, and interpretation of the Stanford-Binet.

688. **Individual Psychological Testing: The Wechsler Scales.** 3 hrs. Prerequisite: Permission of instructor. Supervised study of the use, administration, and interpretation of the Wechsler scales.

691. **Research in Psychology.** 1-16 hrs.

692. **Special Problems I, II, III.** 1-3 hrs. Limit of nine semester hours.

693. **Research in School Psychology I, II.** 1 hr. each. Prerequisite: Admission to the school psychology training program. Introduction to scientific inquiry in school psychology.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

699. **British Studies: Research in Psychology.** 3 hrs.

711. **Seminar in Teaching of Psychology.** 1 hr. An analysis of the psychoeducational problems involved in the undergraduate and graduate teaching of psychology.

712. **Practicum in Teaching Psychology.** 3-6 hrs. Supervised teaching of courses in psychology.

719. **Brain Damage and Behavior.** 3 hrs. Prerequisite: Permission of instructor. Causes of brain injury are studied and their effect on the mental and physical behavior of man are considered.

721. **Conditioning and Learning.** 3 hrs. An intensive study of the role of contemporary theories of learning and motivation in current research.

722. **Cognitive Processes.** 3 hrs. Theory and research in cognitive psychology and its applications.

725. **Motivation.** 3 hrs. Prerequisite: Permission of instructor. A study of the current theories and research in the area of human and animal motivation.

726. **Perception.** 3 hrs. Prerequisite: Permission of the instructor. The development and nature of human perception.

728. **Advanced Experimental Psychology I, II, III.** 3-9 hrs. For graduate students who wish to conduct publishable research not a part of a graduate thesis. Limit of 9 semester hours.

729. **Psychophysiology.** 3 hrs. Prerequisite: PSY 624 and permission of instructor. Study of psychophysiological principles as they apply to research and clinical problems.

730. **Proseminar in Psychophysiology.** 1-3 hrs. May be repeated to limit of 15 hrs. Prerequisite: Permission of instructor. Analysis of major topics in psychophysiology; laboratory techniques and experience.

731. **Community Psychology.** 3 hrs. Prerequisite: Permission of instructor. Concepts and techniques of mental health consultation with emphasis on the psychologist's role in the field of mental health.

733. **Applied Psychology Field Experience.** 1-3 hrs. Open only to psychology majors. Supervised applied experience in a variety of applied settings. Limit of 15 hours.

734. **Behavior Therapy.** 3 hrs. Prerequisite: Permission of instructor. Study of the principles of behavioral change and the evaluation of clinical research in behavior modification.

735. **Clinical Psychology Externship.** 3 hrs. Prerequisite: PSY 736, 782, and permission of the Director of Clinical Training. Supervised clinical experience in community, residential, and hospital mental health settings.

736. **Pre-Practicum in Clinical Psychology.** 3 hrs. Prerequisite: Permission of the Director of Clinical Training and doctoral status in clinical psychology. Procedures for the operation of the Psychology Clinic and basic interviewing.

737. Administration, Supervision, and Consultation in Psychology. 3 hrs. Pre-requisite: Permission of the instructor. Techniques of administration, supervision, and consultation in a mental health setting.

740. Objective Personality Assessment. 3 hrs. Prerequisites: PSY 780 or PSY 777 and permission of the instructor. The use and interpretation of objective personality tests.

741. Projective Personality Assessment. 3 hrs. Prerequisites: PSY 635 and 740 and permission of the instructor. The use and interpretation of the Rorschach, Thematic Apperception Test, and other projective personality instruments.

748. Integration of Clinical Assessment. 3 hrs. Prerequisites: PSY 641, 740, 741, 782 and permission of the instructor. The use and integration of a battery of assessment devices in generating comprehensive psychodiagnostic evaluations.

750. Advanced Social Psychology. 3 hrs. Examination of contemporary theory and research of group influence on the individual.

751. Personnel and Industrial Psychology. 3 hrs. Prerequisite: PSY 451 or 551; or permission of instructor. Intensive study of selected problems in industrial and personnel psychology.

752. Management Training and Development. 3 hrs. Prerequisite: PSY 451 or 551. Study of the principles and techniques of management appraisal and training.

753. Leadership. 3 hrs. Prerequisite: PSY 451 or 551. Study of the factors affecting leadership in a school or industrial setting.

754. Psychology of Organizational Development. 3 hrs. Prerequisite: Admission to the I/O program or PSY 451 or 551. Application of psychological principles to organizational problems.

755. Practicum in Industrial/Organizational Psychology. 3 hrs. Prerequisite: Permission of the I/O Training Director. May be repeated up to 15 semester hours. Supervised I/O training experiences.

756. Children At-Risk. 3 hrs. Topics related to biological and environmental contributions to development, factors deterring normal development, and legal ethical issues.

757. Assessment of Handicapped Children Birth to Five. 3 hrs. Training in methods of assessing cognitive, motor, language, neurological, and behavioral aspects of development.

758. Intervention Procedures for Handicapped Children Birth to Five. 3 hrs. Programming techniques and strategies for language, cognitive, social, self-help, and motor development.

759. Transdisciplinary Seminar in Early Intervention. 1 hr. Provides a common focus and directionality for students involved in the early intervention training program.

761. Experimental Design. 3 hrs. Prerequisites: PSY 660, PSY 663, or permission of instructor. Problems with various experimental designs, with emphasis on complex designs requiring primarily multivariate statistical procedures.

764. Factor Analysis. 3 hrs. Prerequisites: PSY 660, 662, or permission of instructor. An introduction to modern factor analytic and clustering techniques with emphasis on computer applications and interpretation of results.

770. Intelligence: Theories and Development. 3 hrs. Nature of intelligence and its development; critical evaluation of methods of measurement; relation of intelligence to social efficiency.

771. Practicum in School Psychology. 3 hrs. May be repeated to limit of 18 hrs. Prerequisite: Admission to the school psychology training program or permission of instructor. Supervised application of school psychological procedures.

772. Interventions in School Psychology. 3 hrs. May be repeated to limit of 18 hours. Prerequisite: Admission to the school of psychology program or permission of instructor. Theory and application of various interventions in school psychology.

777. Psychological Disorders of Childhood. 3 hrs. A comprehensive analysis of the major behavior disorders of childhood.

778. Experimental Child Psychology. 3 hrs. Prerequisite: Permission of the instructor. An intensive study of theory, methodology, and research in child psychology.

779. Seminar in Developmental Psychology. 3 hrs. Prerequisite: Permission of the instructor. Consideration of specific contemporary problems and issues in developmental psychology. May be taken for a total of 9 semester hours.

780. Advanced Psychopathology. 3 hrs. Prerequisite: Permission of the instructor. Intensive study of personality dynamics as related to aberrant behavior, with emphasis on current research.

781. Neurological Bases of Behavior. 3 hrs. Prerequisites: PSY 624, doctoral status, and permission of instructor. An introduction to neuroanatomy and the behavioral consequences of neuropathology.

782. Clinical Psychology Practicum. 3 hrs. Prerequisites: PSY 736 and five of the seven clinical core courses, and permission of the Director of Clinical Training. May be repeated up to 15 semester hours. Supervised clinical training in the Psychology Clinic.

784. Systems of Psychotherapy. 3 hrs. Prerequisite: Permission of the instructor. An analysis of the theories and techniques of current systems of psychotherapy.

785. Group Therapy. 3 hrs. Prerequisite: Permission of the instructor. Study of the theory and practice of group therapy and group dynamics in clinical groups.

791. Research in Psychology. 1-16 hrs. Prerequisite: Permission of the instructor.

792. Special Problems. 1-3 hrs.

793. Research in School Psychology. 1 hr. May be repeated up to limit of 2 hrs. Prerequisite: Admission to the school psychology training program or permission of instructor. Current research in school psychology.

794. Psychology Research Apprenticeship. 3-9 hrs. Prerequisite: Permission of instructor. Research training through participation in programmatic research conducted within the Department of Psychology.

795. Internship in School Psychology. 4 hrs. Prerequisite: Permission of training director. May be repeated up to 12 semester hours. Supervised, full-time practice of school psychology in an approved setting.

796. Internship in Clinical Psychology. 4 hrs. Prerequisite: Successful completion of PSY 782 and approval of the Director of Clinical Training. To be repeated for 12 semester hours total.

797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

798. Internship in Industrial/Organizational Psychology. 4 hrs. Prerequisite: Permission of the I/O Training Director. To be repeated for 12 semester hours total. Full-time practice of I/O Psychology under supervision in an approved setting.

800. Clinical Health Psychology. 3 hrs. Prerequisites: Enrollment in the clinical training program. The clinical psychologist's role in health psychology.

802. Clinical Neuropsychology. 3 hrs. Prerequisites: PSY 624, 641, 736, 780 and permission of the instructor. An introduction to clinical neuropsychology.

807. Clinical Health Psychology Practicum. 3 hrs. Limit of 9 semester hours. Prerequisites: Enrollment in the clinical health psychology sub-specialty program. Hospital, clinic, and practicum experience in the methods and procedures of health psychology, neuropsychology, and clinical psychophysiology.

898. **Dissertation.** 12 hrs.

RADIO-TELEVISION-FILM (RTF-220)

See Course Listing Under **COMMUNICATION.**

REAL ESTATE AND INSURANCE (REI-617)

532. **Real Estate Finance.** 3 hrs. Prerequisite: REI 330. A study of the sources of real estate funds and analytical techniques for investment decision making.

534. **Income Property Valuation.** 3 hrs. Prerequisite: FIN 389. Emphasis on the income approach to real estate valuation.

598. **International Insurance Seminar Abroad.** 3 hrs. Prerequisite: Consent of Program Director. Conducted in London, England: a series of lectures and discussions involving authorities on international insurance issues and practices.

692. **Special Problems.** 3 hrs. Prerequisite: Consent of department chair.

699. **International Insurance Research Abroad.** 3 hrs. Prerequisite: Consent of Program Director. A research course in international insurance required for any student enrolled in REI 598.

RECREATION (REC-735)

511. **Adapted Activities and Techniques for Disabled Persons.** 3 hrs. Designed to introduce the student to techniques in adapting activities, equipment, and facilities for the delivery of adapted activities for the disabled.

513. **Organization and Administration of Recreation.** 3 hrs. The organization and administration of public recreation agencies and their policies.

515. **Business Procedures for Parks and Recreation.** 3 hrs. Specific business procedures and administrative policies and forms related to recreation-related agencies.

516. **Military Recreation Administrative and Managerial Skills.** 3 hrs. Administrative and managerial skill development in a military environment.

517. **Legal Aspects of Recreation and Leisure Services.** 3 hrs. Legal issues related to leisure services management including legal foundations, legal liability, land use policy, employment regulations, disabled services, and current issues.

523. **Advanced Recreation Management.** 3 hrs. A study of policies, procedures and guidelines for military recreation programs and services.

524. **Community Recreational Resource Services and Organizations.** 3 hrs. The coordination and operation of community recreation resource services including playgrounds, youth service programs, school-community relationships, industrial and military recreation.

525. **Morale, Welfare and Recreation Management Communications.** 3 hrs. Oral and written communications procedures for effective management of Military Recreation programs.

534. **Park Design and Maintenance.** 3 hrs. The principles and applications of design and maintenance concepts as they apply to outdoor recreation areas and facilities.

536. **Park and Recreational Planning.** 3 hrs. The fundamental principles and methodologies necessary for dealing with proper identification, allocation, and use of resources in recreational planning.

541. **Resources Management and Policy.** 3 hrs. Techniques, procedures, and policies affecting management of natural resources. Emphasis given to proper land utilization, environmental protection, and user satisfaction.

543. **Outdoor Education.** 3 hrs. A study of outdoor education, specifically its philosophy, programs, methods, and resources.

544. Operational Administration of Commercial Recreation. 3 hrs. Emphasizes appropriate business management skills which are essential to the successful operation of a commercial recreational enterprise.

547. Interpretation of Cultural and Natural Resources. 3 hrs. The interpretive process as applied to natural and cultural resources, with emphasis on educational/recreational aspects.

550. Leisure Education. 3 hrs. The history, theory and process of leisure education for the mature adult, persons with disabilities and the general populace.

551. Therapeutic Recreation Program Planning. 3 hrs. Study of the organization, programming, and special conduct of recreational programs and activities in institutions.

552. Gerontology and Therapeutic Recreation for Later Years. 3 hrs. An overview of the bio-psycho-social aspects of aging and the provision of recreation services for therapeutic recreation.

564. Issues in Commercial Recreation. 3 hrs. Insight into issues which work to create problems and trends for the commercial recreation service industry.

565. Advanced Club Management. 3 hrs. A study of policies, procedures, and guidelines of military club programs and services.

590. Physical Education and Recreation for the Handicapped. 3 hrs. Designed to acquaint individuals with the theoretical aspects of and the practical application of physical education and recreation for the handicapped.

591. Recreation Education for Teachers. 3 hrs. Programs and benefits of recreation and leisure for the motivation of leaders who are serving or may serve in educating individuals of all ages.

592. Outdoor Recreation Seminar. 3 hrs. Practical and philosophical introduction to the use of outdoors, educational and community programs.

597. Interdisciplinary Seminar in Developmental Disabilities. 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.

598. Families of Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

599. British Studies. 3-6 hrs. Involves variable topics. Lectures and supervised research in England. Offered exclusively through the USM Institute of Anglo-American Studies.

653. Administrative Aspects of Therapeutic Recreation. 3 hrs. An in-depth examination of roles and responsibilities of the activity therapy/Therapeutic Recreation administrator including quality assurance, credentialing, and health care regulations related to activity therapy services.

680. Research Techniques. 3 hrs. Discovery and recognition of problems, evaluation of problems and procedures, types and techniques of research.

691. Research. 1-16 hrs.

692. Special Problems. 1 hr.

694. Field Problems. 1-6 hrs. Prerequisite: Permission of department chairman. Practical experiences dealing with problem situations in the field and related institutional settings.

696. Practicum. 1-6 hrs. arr.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis completed.

701. **Problems and Emerging Trends in Recreation.** 3 hrs. Problems and emerging trends related to recreation with emphasis on problem solving and evaluation.

702. **Research and Evaluation in Recreation and Leisure.** 3 hrs. Designed to develop knowledge and understanding relative to research methods most utilized in recreation.

703. **Philosophical Foundations of Recreation.** 3 hrs. Prevailing concepts, theories, and professional philosophies affecting recreation.

704. **Special Field Studies in Recreation.** 3 hrs. Encompasses the application of various theories to realistic field situations and pertinent areas of concern.

790. **Seminar in Recreation.** 3 hrs. A seminar course pertaining to selected current professional topics in all areas of recreational study.

RELIGION (REL-288)

ANT 512. **Mythology and Folklore.** (May be taken for credit as a religion course.)

ANT 534. **Primitive Religion.** (May be taken for credit as a religion course.)

535. **Religions of the Near East.** 3 hrs. A study of Judaism, Zoroastrian, and Islamic literature and thought.

536. **Mysticism.** 3 hrs. A study of the major themes and issues of religious mysticism-East and West.

537. **Religions of the Far East.** 3 hrs. A study of Hinduism, Buddhism, Taoism, Confucianism, and Shintoism.

557. **Psychology of Religion.** 3 hrs. An examination of modern psychological perspectives on religious beliefs, experiences, and practices. (Cross-listed as PSY 557).

590. **Contemporary Religious Problems.** 3 hrs. An examination of specific problems within the broad spectrum of contemporary religious concern.

599. **Religious Studies Abroad.** 3-6 hrs. The study of religious themes in various parts of the world. Offered abroad through the Center for International Education.

RESEARCH AND FOUNDATIONS (REF-125)

+ 516. **Utilization of Audiovisual Media and Equipment.** 3 hrs.

525. **Instructional Styles and Models in Media Programs.** 3 hrs.

526. **Film and Television in Media Programs.** 3 hrs.

536. **Designing Educational Systems for Individualized Instruction.** 3 hrs. Translation of instructional specifications into prototype systems.

550. **Test Item Development.** 3 hrs. Includes procedures for mastering test item development techniques through active participation.

590. **Instructional Television: Utilization and Production.** 3 hrs. Utilization of television in instructional settings. Emphasis on programming from Mississippi ETV and the use of portopac television equipment.

591. **School Media Center Administration Workshop.** 3 hrs.

599. **British Studies: Research in British Education.** 3 hrs. To provide students with supervised research study on British education that relates to their own interests or educational speciality.

601. **Research: Its Introduction and Methodology.** 3 hrs.

602. **Introduction to Educational Statistics.** 3 hrs. Basic concepts and computations in descriptive statistics. Introduction to sampling procedures and inferential processes in educational research.

604. **Foundations in American Education.** 3 hrs. A brief survey of the philosophical, psychological, sociological, and historical foundations of American education.

605. Cultural Influences on American Education and Society. 3 hrs. A study of European educational systems.

607. Basic Course in Curriculum Development. 3 hrs. An examination of factors influencing planning and procedures for structuring and evaluating curricular experiences.

609. Administration of Media Centers. 3 hrs.

615. Student Discipline in the Schools. 3 hrs. Presentation of general principles, techniques, procedures, and legal aspects of discipline.

+ **616. Instructional Graphics.** 3 hrs.

618. Instructional Photography. 3 hrs.

620. Foundations of Instructional Technology. 3 hrs. Survey of the historical aspects of instructional media. Application of research in the development of technology relating to libraries, classrooms, industry, and instructional settings.

621. Selection and Organization of Media Resources. 3 hrs.

+ **622. Design and Production of Media Materials.** 3 hrs.

+ **623. Advanced Media Productions Techniques.** 3 hrs.

625. Instructional Video and Film Production. 3 hrs.

632. Measuring Results in Education. 3 hrs. Emphasis on selecting and constructing various types of achievement tests and statistical interpretation of data.

644. Instructional Development I. 3 hrs. Prerequisite: REF 516 or permission of the instructor. Survey of various instructional development models for the development, revision, or revitalization of educational programs.

645. Computers in Education. 3 hrs. Applications of computer technology to instructional, information, and administrative programs from the user's point of view.

660. Economic Education for Teachers. 3 hrs. Emphasis on in-depth understanding of our economic system and intergration of economic concepts into the social studies.

680. Direction and Supervision of Student Teaching. 3 hrs. Designed to guide supervising teachers in orienting and involving student teachers.

692. Special Problems. 1-3 hrs.

698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit deferred until thesis is completed.

701. Analysis of Teaching Behavior. 3 hrs. Designed to analyze teacher behavior to determine competency, including interaction analysis and microteaching skills.

709. Social Foundations of Education. 3 hrs. A study of contrasting motivations and values of various cultural groups and their implications for education.

712. Computer Applications in Educational Research. 3 hrs. Prerequisites: REF 761, 762. Skills development course in computer analysis of behavioral science data, systems analysis, financial, and personnel accounting procedures.

718. Practicum in Educational Research. 3 hrs. Prerequisites: REF 761, 762. Application of appropriate research models, structure of research reports, critique of published research and of student's research problem.

720. Measurement in Educational Research. 3 hrs. Prerequisites: REF 761, 762. Survey of the theory of measurement including true score theory, reliability, validity, item analysis, and item selection techniques.

740. Programmed Instruction. 3 hrs. Theories and techniques in designing, producing, and evaluating programmed instructional materials.

742. Research in Instructional Systems Technology. 3 hrs. Research in problems of formulating objectives, analyzing audiences, using media, and evaluating education outcomes.

761. Experimental Design. 3 hrs. Prerequisite: REF 602 recommended. Probability theory and theoretical distributions in experimental design. Techniques including tests, simple and complex analysis of variance, analysis of co-variance.

762. Advanced Regression Analysis. 3 hrs. Prerequisite: REF 761. Correlation and regression theory. Techniques associated with bivariate, partial, and multiple correlation and applied multiple linear regression.

770. Evaluation Design and Methodology. 3 hrs. The principles of evaluation. Involvement in a practical evaluation problem employing measurement techniques and statistical methodology.

791. Field Problems in Educational Research. 1-12 hrs. Prerequisite: Approval of major professor and Educational Research Staff.

792. Special Problems in Educational Research I, II, III. 1 hr. each. Prerequisite: Approval of major professor and Educational Research Staff. Application of specific research procedures in the development of skills in various types of research. The preparation of a scholarly paper is required.

794. Field Problems. 3 hrs.

798. Specialist Thesis. 3 hrs. Selection and development of a practical educational research problem for the specialist's degree. A scholarly research paper is required.

810. Design and Methodology in Institutional Research. 3 hrs. Prerequisites: REF 601, 761, 762. Practical application of institutional research design and methodology emphasizing computer utilization and field work.

816. History of Public Education in the United States. 3 hrs. A critical study of the evolution of public education with emphasis on critical issues.

818. Comparative Philosophies of Education. 3 hrs. A critical examination of theoretical concepts of leading modern philosophers and their implications for education.

820. Comparative Education. 3 hrs. Survey of educational patterns of selected countries.

824. Advanced Experimental Design. 3 hrs. Prerequisites: REF 761, 762. Experimental and quasi experimental designs in educational research. Emphasis upon utilization of design principle and appropriate statistical treatment.

830. Multivariate Analysis in Educational Research. 3 hrs. Prerequisites: REF 761, 762. Theory and application of multiple regression and discriminant analysis, canonical correlation, multivariate analysis of variance and covariance.

893. Advanced Educational Research. 3 hrs. Seminar in types and problems of educational research, observation and data collection methods, and standards of reporting educational research.

SCIENCE EDUCATION (SCE-380)

522. British Studies: History of Science. 3-6 hrs. Lecture series and research in the history of science offered abroad under the auspices of the Institute of Anglo-American Studies. (May be taken as BSC 522 or HIS 522)

+ **532. Science for Elementary Teachers.** 3 hrs. Prerequisites: 12 semester hours of science. Designed to provide experience in presenting scientific principles to the elementary school child.

535. Marine Science for Elementary Teachers. 3 hrs. Prerequisite: Permission of instructor. Designed to acquaint teachers with marine science concepts. (Equivalent to MAR 558)

541. Methods of Teaching the Metric System. 3 hrs. Lectures and exercises in measurements using the International System of Units.

553. Earth and Environmental Science for Intermediate School Teachers. 3 hrs. Prerequisite: Permission of instructor. To familiarize teachers with the materials, methods, and techniques of earth and environmental science.

554. Biological Sciences for Intermediate School Teachers. 3 hrs. An examination of the subject matter, techniques, and methods of teaching the life sciences.

555. Physical Science for Intermediate School Teachers. 3 hrs. An examination of the subject matter, techniques, and methods for teaching the physical sciences.

556. Techniques in Marine Science Education. 3 hrs. Prerequisite: Permission of instructor. Designed to acquaint teachers with the marine resources of the Mississippi Coastal Zone. (Equivalent to MAR 556)

557. Marine Science for Teachers. 3 hrs. Prerequisite: Permission of instructor. Emphasis will be placed on measurements and analysis of the marine habitat and ecological relationships. (Equivalent to MAR 557)

+ 561. Microcomputer Applications in the Teaching of Science. 3 hrs. An examination of software, literature, research and strategies.

570. Biology for Secondary Teachers. 3 hrs. Prerequisite: Biology background. A survey of the philosophy, techniques, and methods of teaching biology.

571. Chemistry for Secondary Teachers—Methods and Techniques. 3 hrs. Prerequisite: Permission of instructor. Course designed to familiarize chemistry teachers with materials, methods, and techniques of teaching chemistry.

572. Physics for Secondary Teachers—Methods and Techniques. 3 hrs. Prerequisite: Permission of instructor.

599. Field Studies in Marine Science Education. 3-9 hrs. Prerequisite: Permission of instructor. Study and investigate marine environments outside of Mississippi. Offered through the Center for International Education.

698. Thesis. 1-6 hrs. for a total of 6 hrs.

700. Science Curriculum in the Public Schools. 3 hrs. Prerequisite: SCE 703. An examination of elementary and secondary science curricula.

701. Problems in Science Teaching. 3 hrs. Prerequisite: Permission of instructor. Study of problems related to curriculum, methodology, activities, professionalism, and evaluation in science teaching.

702. Field Techniques of Demonstrating and Experimenting with Scientific Principles. 3 hrs. For science teachers considering fundamental aspects of biology, chemistry, geology, and physics.

703. Foundations of Science Education. 3 hrs. Prerequisite: Permission of instructor. Study of philosophical premises, the nature of science, psychological and pedagogical theories.

730. Physics for Elementary School Teachers. 3 hrs. Prerequisites: 6 hours in physical science and 6 hours in biological science. Principles and general ideas that can be directly applied to the elementary grades.

731. Chemistry for Elementary School Teachers. 3 hrs. Prerequisites: 6 hours in physical science and 6 hours in biological science. Chemical principles that represent the changes in chemistry that have taken place over the last two decades.

732. Biology for Elementary School Teachers. 3 hrs. Prerequisites: 6 hours in physical science and 6 hours in biological science. A study of content, techniques, and methods of teaching life science concepts.

733. Earth Science for Elementary School Teachers. 3 hrs. Prerequisites: 6 hours in physical science and 6 hours in biological science. A study of techniques and methods of teaching earth science concepts.

789. Seminar. 1 hr. Discussion of current trends and practices in science education.

791. **Research in Science Education.** 1-16 hrs.

792. **Special Problems.** 1-3 hrs. arr.

797. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

798. **Research Problem.** 3 hrs.

898. **Dissertation.** 12 hrs.

SOCIAL WORK (SWK-020)

Foundation

601. **Human Behavior and Social Environment I.** 3 hrs. Introduction to general systems theory and applied to the analysis of individuals, families, small groups, organizations and communities. Concepts covered include information, various forms of feedback, autopoieses, etc.

602. **Human Behavior and Social Environment II.** 3 hrs. Various approaches to physiological cognitive, intellectual and emotion development of the human being. In addition, it analyzes a number of major theoretical explanations of personality.

605. **Social Welfare Policy I.** 3 hrs. History of social work and social welfare; values which influenced policy; formulation of policy.

606. **Social Welfare Policy II.** 3 hrs. Social welfare planning and social policy analysis, with special concern for developing and critiquing policy.

608. **Social Work Generalist Practice I.** 3 hrs. Systemic and problem-solving approaches to social work practice with individuals, families, organizations, and groups; integrative framework for knowledge, values and skills.

609. **Social Work Generalist Practice II.** 3 hrs. Differential practice roles and communication processes; specific attention to resource development, linkage, and utilization.

617. **Social Work Research I.** 3 hrs. Introduction to the foundations of knowledge building through a careful analysis of philosophical promises and examination of new approaches to scientific method. It also covers research designs and other fundamental issues which have bearing on knowledge development in social work.

634. **Social Work Practice in a Diverse Society.** 3 hrs. Comparative cross-cultural theories and concepts related to ethnic-minority groups and alternative life styles.

635. **Social Service Management and Administration.** 3 hrs. Survey of principal management functions in a systems context; study of selected topics such as leadership and organizational communication.

637. **Social Work Research II.** 3 hrs. Prerequisite: SWK 617. Comparative social work research methodologies with special attention to program evaluation.

641. **Field Education.** 4-8 hrs. A practicum designed to integrate and enhance values, knowledge, and skills at both foundation and advanced levels. Includes integrative seminar.

658. **Advanced Interventive Methods.** 3 hrs. Social work intervention focused on cognition, affect, and behavior with individuals, families, and groups. This course is integrated with field seminar SWK 641.

Advanced Practice and Electives

620. **Computer Use for Human Service Workers.** 3 hrs. Introductory course for social workers and other human service workers; focus on management information systems. Includes on-hands computer experience.

651. **Time-Limited Intervention.** 2 hrs. Techniques of task-centered intervention and crisis intervention in social work practice.

655. **Social Work Practice in Child Welfare Settings.** 3 hrs. Multidimensional intervention with children and adolescents who have experienced neglect and abusive conditions.

663. **Consultation and Supervision.** 2 hrs. Concepts and skills related to consultation and supervision with application to a number of systems but emphasizing application to organizations.

665. **Social Work and the Law.** 2 hrs. An exploration of the interrelationships between social work and the law.

666. **Community Development and Social Planning.** 3 hrs. Theories and techniques of community development and planning with special attention to practice needs.

674. **Social Work Practice with Families.** 3 hrs. Theories, intervention skills, policy issues related to families and the social service delivery system.

675. **Social Work Practice with Persons in Middle and Late Life.** 2 hrs. Psychosocial variables at critical life transition points are explored with practice and policy perspectives.

676. **Social Work Practice in Health Systems.** 3 hrs. Assessment and modification of conditions which affect individual's health and mental health through intervention skills with individuals, families, groups.

677. **Social Work Practice with Children and Adolescents.** 3 hrs. Focus on practice concepts, theories and skills for work with specific social adjustment problems utilizing a general systems framework.

691. **Research Practicum.** 1-3 hrs. Prerequisites: SWK 617 and 637. Two semester empirical research project; requires a research proposal, gathering data, and writing a research paper.

692. **Special Problems.** 1-6 hrs. Problem study to develop knowledge and facility in an area of student interest. Paper and/or project required.

693. **British Studies: Social Work with Diverse Cultures.** 3-6 hrs.

694. **British Studies: Social Work with the Elderly.** 3-6 hrs.

695. **British Studies: Social Work with Families.** 3-6 hrs.

696. **Social Work Practice with Groups.** 3 hrs. Design of preventative, developmental and remedial group services for at risk populations.

697. **British Studies: Social Work and the Law.** 3-6 hrs.

698. **Families of the Developmentally Disabled.** 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

699. **British Studies: General Systems Theory-The British Perspective.** 3-6 hrs.

SOCIOLOGY (SOC-292)

515. **Sex Roles and Gender in Society.** 3 hrs. A study of the relationship between sex roles and broader cultural patterns in various societies.

521. **Sociological Topics.** 3 hrs. Variable content; can be repeated three times in separate topical offerings.

523. **Sociology of Health.** 3 hrs. An analysis of the field of health and health care delivery from a sociological perspective.

524. **Sociology of Aging.** 3 hrs. A survey of demographic, social, and cultural aspects of aging with particular emphasis upon American society and the types of problems encountered by older persons.

526. **Sociology of Education.** 3 hrs. A comprehensive study of the educational institution, its relationship to the community and society.

530. **Political Sociology.** 3 hrs. A study of politics as a social institution, its relationship with other institutions, and its place in a changing society.

544. **Juvenile Delinquency.** 3 hrs. A study of causes and the nature of juvenile delinquency, the development of the juvenile court, probation, and other rehabilitative programs.

550. **Social Psychology.** 3 hrs. A study of how the thoughts and behaviors of individuals are influenced by the actual or implied presence of others.

560. **Quantitative Methods.** 3 hrs. A survey of quantitative research techniques, focusing on descriptive and inferential statistics and computer applications.

561. **Population.** 3 hrs. Prerequisite: SOC 460. An introduction to demography, analyzing significant changes in population composition.

562. **Methods of Social Research.** 3 hrs. A study of the production and interpretation of social research with an emphasis on the relationship of theory and method.

571. **Social Institutions.** 3 hrs. A study of selected American social institutions, focusing on class and power structures, the rise of post-industrial society, religious and moral divisions, and democratic individualism.

575. **Social Inequality.** 3 hrs. Research and theory in social differentiation, class, status, power, and mobility. Analysis of inequality and the effects of socioeconomic status upon behavior and social organization.

581. **History of Social Thought.** 3 hrs. An examination of early social thought, tracing the development of western thought and ideas from Hammurabi to Comte.

582. **Sociological Theory.** 3 hrs. A study of classical and contemporary social theory, focusing on selected theorists (e.g. Weber, Durkheim, Marx, Merton, and Goffman) and selected topics, including anomie and alienation, the rise of capitalism, theories of crime, and concepts of self.

599. **British Studies.** 3 hrs. Variable content. Lecture series and research offered abroad under the auspices of the Institute of Anglo-American Studies.

620. **American Community Life.** 3 hrs. A study of the American community life and its social and cultural patterns.

640. **Social Control and Deviance.** 3 hrs. A study of the forms of social control. Independent research projects are reported to the class for discussion and evaluation.

670. **Seminar in Sociological Theory.** 3 hrs. A detailed study of the content and influence of selected major contributors to sociological theory.

671. **Seminar in the Family.** 3 hrs. An advanced course in the family. A study of the structure and function of the family.

677. **Seminar in Demography.** 3 hrs. Designed to develop understanding of data and trends in world and national population and to provide basis for assessing demographic implications of social and scientific change.

681. **Departmental Seminar I.** 1 hr. May be offered for credit in Anthropology.

682. **Departmental Seminar II.** 1 hr. May be offered for credit in Anthropology.

683. **Seminar III.** 1 hr. arr. May be offered for credit in Anthropology.

692. **Special Study Projects in Sociology.** 1-6 hrs. (Tutorial). Special projects in reading, survey, or research in sociology. Work will be under the direction of graduate faculty.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. Thesis. 1-6 hrs. for a total of 6 hrs. Credit will not be recorded until thesis is accepted by the major professor.

792. Special Study Projects in Sociology. 1-6 hrs. for a total of 6 hrs. (above the master's level). Special projects in reading, survey, or research in sociology. Work will be under the direction of graduate faculty.

SPECIAL EDUCATION (SPE-190)

500. The Psychology and Education of the Exceptional Child. 3 hrs. An introduction to exceptional populations and procedures and policies relating to their education and citizenship.

511. Language Development for the Handicapped. 3 hrs. An introduction to language processes and common deficits related to the handicapped.

520. Structure and Function of the Eye. 3 hrs. Identification, function, and care of the eye as it relates to the visually handicapped.

521. Methods and Materials in Teaching Visually Handicapped. 3 hrs. A study of practices commonly used in education programs, including Braille, space orientation, special materials, and organization.

522. Braille. 3 hrs. A skill course in communication through Type 2 Braille.

523. Teaching of Braille. 3 hrs. Prerequisite: SPE 522 or equivalent. Developing methods for teaching Braille to visually handicapped to include reading, mathematics, and production abilities.

524. Mobility Training for the Visually Handicapped. 3 hrs. An introduction to mobility, movement, and spatial awareness for the visually handicapped.

525. Psychology and Education of the Visually Handicapped. 3 hrs. A study of social-emotional and cognitive learning factors of the visually handicapped.

527. Physically Handicapped and Other Health Impaired. 3 hrs. A study of major handicapping conditions associated with physical and health impairments and their educational implications.

528. Methods for Teaching the Physically Handicapped and Other Health Impaired. 3 hrs. Educational programs, counseling techniques, and least restrictive alternative placements for the physically handicapped.

529. Curricula and Mobility Training for the Physically Handicapped. 3 hrs. General curricula development and specific demonstration and simulations in mobility training.

560. Characteristics of the Gifted and Talented. 3 hrs. Study of gifted populations to include characteristics, learning modes, and assessment procedures.

566. Basic Methods and Materials in Gifted/Talented Education. 3 hrs. Curricula building activities for teachers in programs for the gifted.

590. Workshop in Special Education. 3 hrs.

597. Interdisciplinary Seminar in Developmental Disabilities. 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.

598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

630. Advanced Studies in Specific Learning Disabilities. 3 hrs. A study of decoding, cognitive, and encoding deficits in handicapped learning disabled pupils.

631. Advanced Curricula for Specific Learning Disabilities: Elementary. 3 hrs. Methods and materials for instruction of elementary level children with specific learning disabilities.

632. Advanced Curricula for Specific Learning Disabilities: Secondary. 3 hrs. Methods and materials for instruction of secondary level individuals with specific learning disabilities.

634. Advanced Practicum in Specific Learning Disabilities. 3-6 hrs. Professional work with pupils and/or specified activities.

640. Advanced Studies in Mental Retardation. 3 hrs. Problems of diagnosis and treatment. Investigation of current research, curricula design, and social emotional parameters are considered.

641. Vocational Education in Mental Retardation. 3 hrs.

643. Advanced Curriculum Studies for the Mentally Retarded. 3 hrs. Study of different approaches to curriculum development, with emphasis on materials and goals for teaching mentally retarded.

644. Advanced Practicum in Mental Retardation. 3-6 hrs. Professional work with pupils and/or specific activities.

645. Programming for the Severe, Profound, and Multiply Handicapped. 3 hrs. Curricula development activities with extreme learning problems.

650. The Psychology and Education of the Emotionally Disturbed. 3 hrs. This course explores the characteristic of deviant behavior and its causation.

651. Advanced Methods in Behavioral Management for the Handicapped. 3 hrs. This course explores educational programs for the disadvantaged, delinquent, migrant, and other socially deviant groups.

652. Basic Curriculum for the Emotionally Disturbed. 3 hrs. A course investigating programs, methods and materials in the education of the emotionally disturbed child; the role of the teacher in relation to team.

654. Practicum in Emotionally Handicapped. 3 hrs. Professional work with pupils and/or specified activities.

661. Methods and Materials in Teaching the Gifted. 3 hrs. A study of programs, curricula, models, and methodologies for the intellectually advanced.

662. Curricula Development for the Gifted. 3 hrs. Curricula writing, module development, and attentive modes of instruction for gifted pupils.

663. Programming for the Atypical Gifted. 3 hrs. Study of individuals who display diverse modes of high achievement and creativity.

664. Practicum Gifted. 3 hrs. Practicum for advanced students with gifted students in public school or clinical settings.

671. Organizational and Legal Procedures for Special Education. 3 hrs. Organization of units for the exceptional child and legal procedures relating to programs.

680. Advanced Practicum in Special Education. 3-9 hrs. Practicum for master's degree students unique to individual program plans. The experience will focus on assessment, curriculum, and/or other issues related to exceptional individuals.

691. Research in Special Education. 1-16 hrs.

692. Special Problems. 1 hr. Examination of medical, sociological, biological, psychological, and institutional aspects of exceptional children.

694. Field Problems. 3 hrs.

700. Issues in Special Education. 1 hr. A study of current theories, models, programs, and reports in special education. Open to non-majors.

701. Problems in Special Education Research Design. 3 hrs. Primary emphasis is placed on the review, development, and evaluation of research topics in the student's area of specialization.

704. Perceptual-Motor Development for the Handicapped. 3 hrs. An investigation of perceptual motor behavior as it relates to child development.

709. Diagnostic Techniques for Exceptional Children. 3 hrs. Interpretation and application of measurement for exceptional children with emphasis on curriculum decision making. Open to non-majors.

770. Administration and Supervision of Program for Exceptional Children. 3 hrs. Designed for educators and supervisors of programs for exceptional children; organization and administration of programs for exceptional children.

772. Internship in Special Education Administration. 1-6 hrs. To provide internship experience for specialist and doctoral students in Special Education Administration, institutions, state department.

781. Children at Risk. 3 hrs. Topics related to biological and environmental contributions to development, factors deterring normal development, and legal ethical issues.

782. Assessment of Handicapped Children 0-5. 3 hrs. Training in methods of assessing cognitive, motor, language, neurological, and behavioral aspects of development.

783. Intervention Procedures for Handicapped Children 0-5. 3 hrs. Programming techniques and strategies for language, cognitive, social, self-help, and motor development.

784. Transdisciplinary Seminar in Early Intervention. 1 hr. Provides a common focus and directionality for students involved in the early intervention training program.

791. Research in Special Education. 1-16 hrs. Prerequisite: Approval of the major professor. To be conducted in the student's area of specialization.

792. Special Problems. 3 hrs.

794. Specialist Field Study. 1-6 hrs. A practical project conducted in the student's area of specialization.

797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

798. Specialist Thesis. 6 hrs. A scholarly project conducted in the student's area of specialization.

801. Teacher Education in Special Education. 3 hrs. Development of programs, courses of study, observation techniques, models, micro-teaching units, modules in higher education.

802. Service Units and Public Relations in Special Education. 3 hrs. Inservice training units, conference planning, grant writing, workshop, parent and national organizations.

803. Program Evaluation and Funding in Special Education. 3 hrs. Study of program accountability modes, grant writing, and sources.

880. Internship in Teacher Education. 1-6 hrs. Individual cases are tested by students and all available information is integrated for diagnostic and educational purposes.

898. Dissertation. 12 hrs.

SPEECH AND HEARING SCIENCES (SHS-296)

501. Language and Speech Development. 3 hrs. Presents the body of knowledge related to speech and language acquisition as it occurs normally.

502. Anatomy and Physiology of the Hearing Mechanism. 3 hrs. Provides background in the anatomy and physiology of the hearing mechanism.

503. Anatomy and Physiology of the Speech Mechanism. 3 hrs. Introduces structural and functional aspects of the speech mechanism.

510. Methods and Program Design in Communicative Disorders. 3 hrs. Procedures for designing and administering speech pathology programs in various settings.

512. Diagnostic Procedures: Speech Pathology I. 3 hrs. Prerequisites: SHS 211, 411. Current evaluation procedures in speech-language pathology.

513. Voice Disorders. 3 hrs. Prerequisites: SHS 211, 403. Anatomical and physiological bases of voice production and the disorders.

514. Stuttering and Related Problems. 3 hrs. Prerequisite: SHS 211 or permission. The theories, research findings, and basic remedial aspects of fluency disorders are presented.

515. Speech and Language Disorders of the Cerebral Palsied. 3 hrs. Prerequisites: SHS 211, 403 or permission. The physical and speech characteristics of the major subtypes of the disorders are presented.

516. Adult Aphasia and Related Problems. 3 hrs. Prerequisites: SHS 211, 403 or permission. Presents theory, research findings, and basic therapy methods for neurogenic communicative disorders.

517. Speech and Language Disorders Related to Cleft Palate. 3 hrs. Prerequisites: SHS 211, 403 or equivalents. Multidisciplinary management of children and adults with cleft palate is presented.

518. Advanced Clinical Methods. 3 hrs. Students engage in an in-depth study of the use of specific treatment and/or diagnostic procedures.

519. Organic Speech Disorders. 3 hrs. This course surveys symptomology, etiology, and treatment procedures for organic speech disorders.

521. Aural Rehabilitation. 3 hrs. Prerequisite: SHS 221 or equivalent. Covers the management of clients with hearing loss from infants through the elderly.

522. Diagnostic/Prescriptive Teaching of the Hearing Impaired. 3 hrs. Presents task analysis, informal test construction and formal assessment for hearing impaired.

523. Basic Sign Language. 3 hrs. Concepts of total communication, sign language and finger spelling are stressed.

525. Psycho-Social Factors Associated with Hearing Impairment. 3 hrs. Prerequisite: Permission of instructor. Emphasizes psycho/social growth and development of deaf children.

526. Secondary School Methods and Curriculum for Hearing Impaired Children. 3 hrs. Prerequisites: SHS 433, 438. Emphasizes specialized teaching methods and curriculum for hearing impaired high school students.

528. Clinical Audiology I. 3 hrs. Prerequisite: SHS 221. Presents concepts in acoustics, calibration standards and basic audiological tests.

529. Intermediate Sign Language. 3 hrs. Prerequisite: SHS 523 or permission. A continuation of the Basic Sign Language Course with additional signs and situational experiences.

530. Speech Pathology and the Hearing Impaired Child. 3 hrs. Reviews speech and language problems, and describes methods for management.

531. Language Disorders I: Assessment of Children with Language Disorders. 3 hrs. Differentiates normal, disordered, and deviant language with remedial procedures.

532. Language Disorders II: Habilitation of the Aphasic Child. 3 hrs. A multisensory intervention program for auditory processing and communication disorders.

533. Developing Language Skills with the Hearing Impaired. 3 hrs. Presents development of language by hearing impaired children.

534. Learning Strategies for the Multiply-Handicapped Hearing Impaired Child. 3 hrs. Prerequisites: EPY 374, SPE 400, SHS 433, 437 or permission. Covers definition, identification, and management of multiply-handicapped hearing impaired.

535. Developing Oral/Aural Communication in Hearing Impaired Children. 3 hrs. Methods of teaching and researching oral/aural communication are discussed.

536. Developing Reading in the Hearing Impaired. 3 hrs. Prerequisite: SHS 433 or permission. The reading process, diagnostic-prescriptive teaching, and evaluation of reading skills are discussed.

537. Introduction to Education of the Hearing Impaired. 3 hrs. Analysis of historical and current trends influencing educational programming is presented.

538. Problems in Academic Subjects for the Hard-of-Hearing and Deaf. 3 hrs. Prerequisites: SHS 433, 434, 436. Stresses the need for continuous, consistent and coordinated academic programs.

539. Education of Preschool Hearing Impaired Children. 3 hrs. Prerequisite: SHS 221. Practicum required. The establishment, operation, and management of preschools are discussed.

540. Advanced Methods of Communicating with the Hearing Impaired. 3 hrs. Prerequisite: permission. Develops extensive sign vocabulary, introduces ethics of interpreting, and individualizes training for specific situations.

597. Interdisciplinary Seminar in Developmental Disabilities. 3 hrs. Presents a core of knowledge and experience from various disciplines on developmentally disabled.

598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

599. British Studies: Comparative Problems in Speech and Hearing Science. 3-6 hrs. Offered abroad under the auspices of the Institute of Anglo-American Studies.

601. Designs in Research for Speech and Hearing. 3 hrs. Statistical procedures concerning group and single-subject designs.

602. Current Topics in Speech and Hearing Sciences. 3 hrs. Varies each time the course is offered.

612. Neurophysiology of Speech and Language. 3 hrs. Prerequisite: permission. Establishes neuroanatomical and physiological bases for speech production.

621. Hearing Aids. 3 hrs. Prerequisite: SHS 221 or permission. Presents components of electroacoustic characteristics of hearing aids and their use.

623. Clinical Audiology II. 3 hrs. Prerequisite: SHS 528 or permission. Special auditory tests used to determine the site of lesion of hearing loss.

625. Audiological Instrumentation. 3 hrs. Prerequisite: SHS 221 or permission. Covers basic electronics, auditory function measurements, research, and computer use.

633. School Curricula for the Hearing Impaired. 3 hrs. Prerequisites: SHS 433, 436, 437. Curricula analysis and review are stressed (majors only).

641. Medical Diagnosis and Treatment of Speech and Hearing Pathologies. 1-4 hrs. Prerequisite: permission. Provides opportunities for observation of operations on the auditory or speech mechanism.

642. Augmentative/Alternative Communication Systems. 3 hrs. Prerequisite: permission. Survey and evaluate systems, procedures and teaching strategies.

692. Special Problems. 1-6 hrs. Prerequisite: permission. Students completing Plan B paper should register for three (3) hours.

694. **Off-Campus Practicum in Speech and Hearing Sciences.** 1-9 hrs. Prerequisite: permission. Students are assigned to medical, institutional, private practice, or clinical settings for supervised experience.

695. **Student Teaching Off-Campus Practicum.** 1-9 hrs. Prerequisite: permission. Students participate in supervised management of speech/language impaired school children.

696. **Practicum in Speech and Hearing Sciences, Audiology, Language Disorders, or Speech Pathology or Education of the Deaf.** 1-9 hrs. Prerequisite: permission. Students participate in diagnosis and treatment of children and adults with communicative disorders.

697. **Independent Study and Research.** Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

698. **Thesis.** 3-6 hrs. for a total of 6 hrs.

701. **Seminar in Psychoacoustics.** 3 hrs. Presents methods for studying preception of acoustic signals, detection of stimuli, perception of loudness, and pitch.

702. **Seminar in Language Problems.** 3 hrs. Language pathologies, evaluation procedures, and treatment methods are studied.

703. **Quantitative Methods.** 3 hrs. Enrollment suspended.

711. **Seminar in Aphasia and Related Disorders.** 3 hrs. Etiologies, evaluations in Neurolinguistics and current treatment procedures are presented.

712. **Seminar in Articulation Disorders.** 3 hrs. Current theories, diagnostic procedures, and therapeutic methodologies in articulation and phonology are studied.

713. **Seminar in Cerebral Palsy.** 3 hrs. Current etiologies, evaluation procedures, and treatment techniques are considered.

714. **Seminar in Cleft Palate.** 3 hrs. Students review the current research and interdisciplinary management of cleft lip and palate individuals.

715. **Seminar in Clinical Counseling in Speech-Language Pathology and Hearing.** 3 hrs. Therapeutic communication techniques, interview techniques, and counseling theories are studied.

716. **Seminar in Stuttering and Related Disorders.** 3 hrs. Advanced study of theories, research and remedial procedures related to fluency disorders.

717. **Seminar in Voice Disorders.** 3 hrs. Advanced study of pathologies, diagnosis, procedures, and remedial methods for voice and resonance problems.

718. **Seminar in Psychology of the Deaf and Speech Handicapped.** 3 hrs. Effects of disordered communication on life styles are studied.

719. **Seminar in Problems and Procedures in Evaluating Children.** 3 hrs. The weaknesses and strengths of standardized tests are discussed.

722. **Seminar in Pediatric Audiology.** 3 hrs. Emphasizes behavioral and objective audiological evaluation of infants and young children.

723. **Seminar in Electroacoustic Measurements in Hearing.** 3 hrs. Administration and interpretation of electrophysiological auditory measurements.

724. **Seminar in Industrial Hearing Conservation.** 3 hrs. Presents effects of noise exposure on the auditory mechanism, measurement of noise, and legislation related to industrial hearing conservation.

726. **Auditory Perceptual Disorders.** 3 hrs. Theories and tests are studied.

727. Seminar: Association Method. 3 hrs. Prerequisite: permission. Evaluation, management plans and intervention techniques for language disordered children are presented.

730. Language Intervention with Infants. 3 hrs. Current research in infant language development and intervention are explored.

761. Laboratory in Speech and Hearing Science. 1-3 hrs. Students use basic research instruments in a controlled setting.

763. Laboratory in Speech Pathology. 1-3 hrs. Students conduct supervised laboratory research using instruments.

764. Laboratory in Language Disorders. 1-3 hrs. Specialized testing procedures are learned.

781. Children At Risk. 3 hrs. Topics related to biological and environmental contributions to development, factors deterring normal development, legal and ethical issues.

782. Assessment of Handicapped Children 0-5 Years. 3 hrs. Training in methods of assessing cognitive, motor, language, neurological, and behavior aspects of development.

783. Intervention Procedures for Handicapped Children 0-5 Years. 3 hrs. Programming techniques and strategies for language, cognitive, social, self-help, and motor development.

784. Transdisciplinary Seminar in Early Intervention. 1 hr. Provide a common focus from various disciplines for early intervention with handicapped children.

791. Research in Speech and Hearing Sciences. 1-16 hrs. Prerequisite: permission. Teaches advanced research procedures.

792. Special Problems. 3 hrs. Content varies.

797. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a dissertation, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of dissertation but who are actively working on a dissertation, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

898. Dissertation. 12 hrs.

SPEECH COMMUNICATION (SCM-216)

See Course Listing Under **COMMUNICATION.**

THEATRE (THE-689)

501. Costume Design. 3 hrs. Prerequisite: Permission of instructor. Costume design in theatrical production.

503. Advanced Movement/Combat. 2 hrs. Course in stage movement and dance as well as stylized movement and stage combat.

506. Scenic Design. 3 hrs. Elements of scene design. Play analysis in terms of visualization and style and the mechanics of developing an effective stage setting.

510. Stage Sound Engineering. 3 hrs. Principles and practice in stage sound engineering.

511. Advanced Voice for the Actor. 3 hrs. Diction, projection, and techniques for dealing with period language.

512. Stage Lighting. 3 hrs. Prerequisite: Permission of instructor. Theory and application of general and special lighting, color, instrumentation, and control.

514. Improvisation. 3 hrs. A performance course for actors, directors and teachers of drama, utilizing improvisation as a tool for instruction.

515. **Fundamentals of Children's Theatre.** 3 hrs. Methods and techniques of producing plays for elementary age school children.

516. **Intermediate Acting II.** 3 hrs. Improvisation and advanced scene study including absurdist, classic, surrealist, and verse drama.

517. **Period Acting Styles I.** 3 hrs. Study of acting styles from ancient Greece through Shakespeare. Utilizing speech, movement, acting style, and masks.

518. **Period Acting Styles II.** 3 hrs. Study of styles of acting from restoration through 1900. Utilizing speech, movement, and acting style.

520. **Advanced Directing.** 3 hrs. Prerequisite: THE 320 or equivalent.

527. **Theatre History I.** 3 hrs. Greek to Restoration.

528. **Theatre History II.** 3 hrs. Restoration to present.

530. **Summer Theatre I.** 3 hrs. Prerequisite: Permission of staff. Concentrated applied theatre.

531. **Summer Theatre II.** 3 hrs. Continuation of THE 530.

533. **Design Studio I.** 3 hrs. Rendering commonly used theatrical materials.

534. **Design Studio II.** 3 hrs. Prerequisite: THE 200 and THE 306. Scenographic techniques.

535. **Advanced Scene Design.** 3 hrs. Prerequisite: THE 306 or permission of instructor.

545. **Advanced Stage Lighting.** 3 hrs.

550. **The Audition Process.** 2 hrs. Prerequisite: Permission of instructor, audition or THE 416. Methods and techniques needed to audition and interview for the professional theatre.

551. **The Rehearsal Process.** 2 hrs. Prerequisite: Permission of instructor, audition, or THE 416. Participation in the dissection and analysis of the rehearsal process from casting through performance.

559. **Musical Theatre Production.** 3 hrs. The study of different forms and styles of musical theatre with special attention to the various elements of production.

560. **Costume Design Studio.** 3 hrs. Projects in designing costumes for plays, opera, and dance. Emphasis placed on costume designs as an element in a total production concept.

561. **Advanced Theatrical Makeup.** 3 hrs. Projects in makeup design and execution. Emphasis placed on three-dimensional makeup techniques for theatre, television, and film.

571. **Performance and Production Internship.** 1-9 hrs. Professional experience in student's area of emphasis received while in residence with an approved professional organization.

580. **Directing Children's Theatre.** 3 hrs. Prerequisite: THE 320, THE 420, or permission of the instructor. Techniques of directing, organizing, and administering a children's theatre program.

581. **Repertory Theatre.** 3-9 hrs. Participation in the analysis and preparation of the performances of four plays in repertory. Daily and nightly involvement (approximately ten hours per day) in theatre workshops (voice, movement, or technical theatre) and in rehearsals for the plays. (Must enroll in three 3-hour sections.)

590. **Theatre Workshop.** 3 hrs. Designed for the non-theatre major (i.e., English, speech music, etc.) who is responsible for directing school or community drama activities.

599. **British Studies in Theatre.** 3-6 hrs.

601. **Introduction to Graduate Study in Theatre.** 2 hrs. Seminar in methods and materials for research in theatre; introduction to the bibliography of the field; organization and form of thesis/creative project.

606. Dramatic and Performance Theory. 3 hrs. Surveys literature, theory, and criticism of western theatre.

611. Seminar: Contemporary Trends in Theatre. 3 hrs.

612. Seminar in Theatre Production. 3 hrs. Theory behind contemporary staging techniques, and research in other advances in staging.

613. Seminar in Theatre Design and Structure. 3 hrs. Research in architectural and acoustical design, lighting, seating, color, use, and stage requirements.

614. Seminar in Acting and Directing. 3 hrs.

615. Seminar in Dance, Opera, and Theatre. 3 hrs.

616. Seminar in Community and Regional Theatre. 3 hrs.

620. Playwriting. 3 hrs. Prerequisite: Permission of instructor.

679-L. Practicum in Box Office and Publicity. 1-3 hrs. May be taken for a total of nine (9) hours.

681-L. Practicum in Acting and Directing. 1-3 hrs. May be taken for a total of nine (9) hours.

682-L. Practicum in Costume and Makeup. 1-3 hrs. May be taken for a total of nine (9) hours.

683-L. Practicum in Scene Design and Technical Theatre. 1-3 hrs. May be taken for a total of nine (9) hours.

684-L. Practicum in Lighting and Sound Engineering. 1-3 hrs. May be taken for a total of nine (9) hours.

685-L. Practicum in Reader's Theatre and Oral Interpretation. 1-3 hrs. May be taken for a total of nine (9) hours.

686-L. Practicum in Creative Dramatics and Children's Theatre. 1-3 hrs. May be taken for a total of nine (9) hours.

687-L. Practicum in Dance and Movement. 1-3 hrs. May be taken for a total of nine (9) hours.

691. Research in Theatre. 1-16 hrs.

692. Special Problems I, II, III. 1-3 hrs. each. Investigation into specialized areas of interest within the broad area of theatre.

696. Practicum in Theatre I, II, III. 3 hrs. each. THE 696 may be taken three times for a total of nine hours.

697. Independent Study and Research. Hours arranged. Not to be counted as credit toward a degree. Students actively working on a thesis, consulting with the major professor and/or using other resources of the University may enroll in this course. Students who are not in residence and are not enrolled in, at least, 3 hours of thesis but who are actively working on a thesis, consulting with the major professor, and/or using other resources of the University must enroll in this course for at least 3 hours each semester.

699. Creative Project. 1-8 hrs.

THERAPY (THY-740)

511. Seminar in Corrective Therapy. 1 hr. An introductory seminar for students interested in careers in corrective therapy.

521. Clinical Experience. 1-4 hrs. A supervised internship in various habilitation, rehabilitation or neuropsychiatric clinics. May be repeated.

554. Neurological and Pathological Concepts and Implications in Human Functions. 3 hrs. A review of the central nervous system and pathology as related to muscular control and disease that limits normal human functioning.

555. Pathological Concepts and Implications in Human Functioning. 3 hrs. A review of dynamic disease processes that affect body functioning with an emphasis on those diseases which affect the major organs or systems related to motor functions.

561. Corrective Therapy and Rehabilitation Medicine. 2 hrs. An introduction to the basic concepts and considerations necessary for effective functioning in the clinical setting.

562. Spinal Cord Injuries and Muscle Disorders. 2 hrs. A review of normal and abnormal functioning of the motor pathways with emphasis on evaluation and rehabilitation of specific motor disorders and spinal cord injuries.

563. Normal Human Locomotion. 2 hrs. An indepth analysis of normal human locomotion and its impact on ambulation training, prosthesis gait deviations and blind mobility training.

564. Cardiovascular and Respiratory Disorders. 2 hrs. A review of normal and abnormal functioning and rehabilitation programs for cardiovascular and respiratory disorders.

571. Accelerated Corrective Therapy Rehabilitation Ward Program. 2 hrs. An introduction to the basic concepts and treatment procedures used in accelerated rehabilitation ward programs.

572. Dynamics of Psychiatric Group Rehabilitation Programs. 2 hrs. The complexities in directing neuropsychiatric group activities.

573. Neuro-Psychiatric Geriatric Training. 2 hrs. An introduction to the multi-problem areas of communication with motivating and treating the geriatric, neuropsychiatric patient.

574. Programs for the Severely Disturbed Psychiatric Patient. 2 hrs. An introduction to the problems of treating the psychiatric patient in a locked ward setting.

597. Interdisciplinary Seminar in Developmental Disabilities. 3 hrs. Study of the interdependent contributions of relevant disciplines in training, service, and research.

598. Families of the Developmentally Disabled. 3 hrs. Interdisciplinary approach to the study of families of the developmentally disabled.

781. Children At Risk. 3 hrs. Topics related to biological and environmental contributions to development, factors deterring normal development; legal and ethical issues.

782. Assessment of Handicapped Children 0-5. 3 hrs. Training in methods of assessing cognitive, motor, language, neurological, and behavior aspects of development.

783. Intervention Procedures for Handicapped Children 0-5. 3 hrs. Programming techniques and strategies for language, cognitive, social, self-help, and motor development.

784. Transdisciplinary Seminar in Early Intervention. 1 hr.

TOXICOLOGY (TOX-385)

570. Toxicology. 3 hrs.

GRADUATE FACULTY

- LUCAS, AUBREY KEITH, President of the University and Professor of Educational Leadership and Research. B.S., M.A., University of Southern Mississippi; Ph.D., Florida State University.
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¹Leave of absence, 1989-1990

²Leave of absence, Fall Semester

³Leave of absence, Spring Semester

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